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# The

# American Economic Review

VOL. VI

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No. 3

#### FACTORS IN AMERICAN MORTALITY

A STUDY OF DEATH RATES IN THE RACE STOCKS OF NEW YORK STATE, 1910<sup>1</sup>

In an address delivered before this section a year ago, entitled "The Trend of American Vitality," I ventured to point out that the character of our immigration during the last twenty years was a factor in the increasing mortality of the higher age groups. To summarize the argument, it was shown that immigration played a very large part in the growth of population in the states composing the registration area; that the foreign countries from which our immigrants come show uniformly a higher mortality rate than that prevailing in the United States; and that in the state of New York, in 1910, the mortality of the native born was, as a whole, considerably lower than that of the foreign born. This was found to be true for both sexes, and especially at the adult and higher ages. Brief reference was finally made to the rates from the principal causes of death which apparently accounted for these differences. The data then at hand were limited, but were nevertheless sufficient to show that the effect of the mortality of the foreign born on that of the total population was not altogether favorable, and that it was highly desirable to get more evidence on this subject.

In this paper, I propose to carry the analysis further, and to present the added evidence which has been gathered. I shall submit the mortality figures for the state of New York to an examination to show the facts for each of the important race stocks, and shall attempt to evaluate the various racial elements as factors in the general mortality. Consideration will be given to the important items of sex, age, and causes of death. We shall incidentally obtain a picture of the effect of life in America

<sup>&</sup>lt;sup>1</sup>Read before Section I, Social and Economic Science, American Association for the Advancement of Science, December 29, 1915.

on the various foreign born peoples. We shall also learn, especially from the consideration of the diseases which cause death, where most effort in public health work should in future be directed.

I present for your consideration a table and two graphs giving the mortality rates in the state of New York, for the year 1910, of the following three classes of the white population:

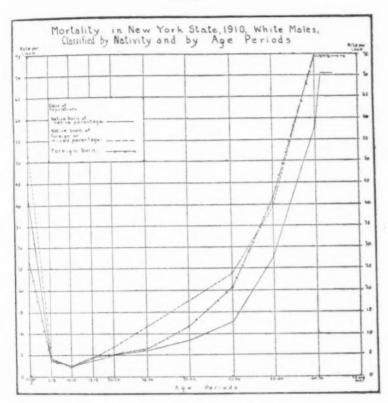
- a. The native born of native parentage;
- b. The native born of foreign or mixed parentage:
- c. The foreign born.

Table 1.—Deaths per 1,000 white population among native born of native parentage, among native born of foreign or mixed parentage, and among foreign born, by sex and by age period: New York state, 1910.

		MALES		1	FEMALES	
Age period	Native born of native parentage	Native born of foreign or mixed parentage	For- eign born	Native born of native parentage	Native born of foreign or mixed parentage	For- eign born
All ages:						
Crude rate	15.9	18.7	17.2	18.9	14.7	16.3
Ages 10 and over:						
Crude rate	13.8	18.2	17.5	12.4	9.7	16.6
Standardized rate	13.8	17.2	17.1	12.4	13.9	16.1
Under 10	23.5	81.0	8.4	19.6	27.0	8.3
10-14	2.5	2.2	2 2.5	2.6	2.1	2.4
15-19	8.6	4.1	4.4	3.2	3.2	3.2
20-24	5.0	6.8	5.2	4.7	5.2	4.0
25-44	6.9	14.8	8.7	5.7	9.8	7.5
45-64	18.8	28.2	128.0	14.8	20.0	28.4
65-84	77.8	89.9	90.4	68.2	73.9	87.7
85 and over	268.9	323.0	272.7	242.3	324.9	270.

A number of observations must be made with reference to Table 1, before a comparison of the figures for the three nativity groups can safely be made. In the group "under age 10" a very low mortality rate appears for the foreign born males and females. The figures are, however, entirely inadequate as measures of the mortality among the foreign born in this age period. The heaviest mortality in the period "under 10" is in the first year of life, at which age there is virtually no foreign born population. In fact, there is only a very small foreign born representation in the entire period under 5. The death rate "under 10" is practically a rate for the period 3-9 for the foreign born. The extremely low figure for the period "under 10" is thus explained,

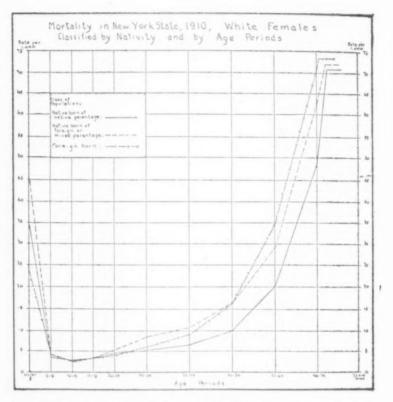
GRAPH I



and its incomparability with the other rates is established. The absence of the foreign born in the earliest ages affects their crude mortality rates for "all ages" very appreciably. At least 3, and perhaps 4, deaths per thousand should be added to the figures given, in order to compensate for this lack of infants among immigrants.

After the first period—that is, beginning with age 10—the figures for the three classes are for all practical purposes comparable. The males in the period "10-14" show virtually the same death rate for the three classes, but beginning with "15-19" and continuing to the end of life the rates for the native born of native parentage are the least. In the age periods "20-24" and "25-44," the principal working period of life, the foreign

GRAPH II



born have a considerably lower mortality than the native born of foreign or mixed parentage, but in the next two age periods—that is, up to the age period "85 and over"—the two sets of figures are practically identical. Very similar conditions obtain for the females. No comparisons can be made in the first age period. The three sets of rates are the same in the age period "15-19." The foreign born show the least rate in the age period "20-24," but beginning with 25 and continuing throughout the rest of life the native born of native parentage have the most favorable mortality. The foreign born females show the highest mortality in the age period "45 to 84."

We may then summarize Table 1 as follows: The native born of native parentage, virtually without exception, show the lowest

death rates. This condition is very marked in the adult period of life-at ages 25 to 64. The rates of the native born of foreign or mixed parentage and those of the foreign born-that is, of the children of immigrants and of the immigrants themselves-do not lend themselves readily to comparison. rates for the two groups run side by side for some periods and diverge for others, following no obvious law. of course, realized that these two groups of our population are largely incomparable, because of the differences in race composition, especially at the various age periods. Thus the native born of foreign or mixed parentage after middle life represent the children of an older immigration, which occurred prior to 1885, and which was largely Irish and German in composition. The foreign born after middle life, on the other hand, are more representative of the newer immigration, occurring since 1885, which is largely Jewish, Italian, and Slavic in composition. It is imperative, therefore, that we examine. in so far as data are available, the mortality rates of the race groups that compose the "foreign born." This will throw light not only on the aggregate rates for the "foreign born"-that is, on columns 3 and 6 in the table-but indirectly on the rates of native born of foreign or mixed parentage.

Fortunately for these purposes I have been able to obtain from the office of the Director of the Census a series of manuscript tables giving the number of persons and number of deaths in the nativity groups composing the foreign born population in the state of New York. It has been possible, as a result, to compute the essential rates for the various age periods and for the two sexes. This will form the principal contribution of this paper.<sup>2</sup>

It is possible to differentiate in the group "foreign born" the following nationalities: Russians, Italians, Germans, Irish, Austro-Hungarians, and English, Scotch, and Welsh. These are arranged in descending order according to their proportionate representation in the population of New York state at the time of the 1910 census. It is understood that the several designations are not always exactly synonymous with the race stocks, since a few include a number of different races. This subject will be con-

<sup>&</sup>lt;sup>3</sup> My sincere thanks are due both to Mr. Sam. L. Rogers, Director of the Census, and to Mr. Richard C. Lappin, Chief Statistician, Division of Vital Statistics, Bureau of the Census, for their courtesy and substantial assistance in providing the sources of my data.

sidered more fully in the treatment of each nationality. Together, these six nationalities comprised 2,371,090 persons, or 86.9 per cent of all the foreign born, and 26.5 per cent of the total white population of the state of New York in 1910. It is to be regretted that the lack of trustworthy figures makes it impossible to compare each of these foreign nationalities with the native born of the corresponding foreign parentage. Our discussion will, therefore, be limited to a comparison of the death rates by age periods for each of these groups with the native born of native parentage.

#### Russians

In 1910 there were in New York state 558,952 persons born in Russia. They formed 20.5 per cent of the total foreign born and 6.2 per cent of the total white population. The term "Russian" includes a large proportion of Jews, as well as Poles and true Russians. Of all the Russian immigrants into the United States in the period 1899-1910, 43.8 per cent were Jews, and it is highly probable that an even larger proportion of the Russians in New York state in 1910 were of the Jewish race. This is an important point to keep in mind, because the Jews uniformly

Table 2.—Deaths per 1,000 while population among persons born in Russia, and among native born of native parentage, by sex and by age period; New York state, 1910.

	MA	LES	FEMAL	ES
Age period	Native born of native parentage	Russian	Native born of native parentage	Russian
All ages:				
Crude rate	15.9	7.5	13.9	6.6
Ages 10 and over:			1010	0.0
Crude rate	13.8	7.7	12.4	6.8
Standardized rate	13.8	13.1	12.4	12.3
Under 10	23.5	4.4	19.6	3.7
10-14	2.5	1.6	2.6	1.4
15-19	3.6	2.6	3.2	1.8
20-24	5.0	3.8	4.7	2.9
25-44	6.9	5.1	5.7	5.3
45-64	18.8	20.1	14.3	16.0
65-84	77.3	78.4	68.2	69.8
85 and over	268.9	255.8	242.3	257.8

<sup>\*</sup>Figures for Poles given separately in census returns were apportioned between Russians, Austro-Hungarians, and Germans in this order, 3, 16, and 16, respectively.

show a lower mortality than the races among whom they live. Thus, according to Nowosselsky, the Jews in Russia showed at every age period a death rate half as great as that of the Russians belonging to the Orthodox Church. This is true for both sexes. With the restriction in mind, then, that our figures for Russians are really for a group composed half of Jews, I present Table 2 for 1910 for the state of New York.

Attention must again be directed to the utter incomparability of the two sets of figures for the age period "under 10." Beginning with "10-14" and continuing through the period "25-44," the rates for the Russian born are uniformly and appreciably lower than those for the native born of native parentage. In the age period "45-64," and in the subsequent period, for males, and in all periods for females, the Russians show a slightly higher mortality than the native born of native parentage. For all ages combined, "10 and over," the crude rate for the Russian males is 7.7, as against 13.8 for the native born of native parentage; for the Russian females the crude rate is 6.8, as against 12.4 for those of native parentage. But when standardized for the differences in age distribution, with the distribution of the native born of native parentage as a basis, the rate becomes 13.1 for the Russian males and 12.3 for females. The corresponding figures for the native born of native parentage, 13.8 and 12.4 respectively, are the same as the crude rates given above, because these are taken as our standard. When thus standardized the rates for the Russians covering this long period of life are much the same as for the native born of native parentage. The favorable influence of the Jewish stock is very clearly shown in the low rate of mortality of the Russians in New York state.

General death rates such as we have quoted are after all but a composite of the rates for the various individual causes of death. Light is, therefore, thrown on the above findings by a more detailed examination of the mortality of persons born in Russia to show the part played by certain of the principal diseases and conditions causing death. Unfortunately the rates for specific causes have not yet been computed for the native born of native parentage. As a result, each one of the foreign stocks must be compared with the corresponding figures for the entire group of the native born (Table 3).

Among Russians in New York state there is a much lower death rate from pulmonary tuberculosis than among the native

born (Table 4). In the age period "25-44," for example, they show a tuberculosis death rate for males of 117.1 per 100,000, as against 352.0 among natives. In the same age-class females

7		All o	causes	Tuber	Tuberculosis of lungs	Cancer		Org heart d	Organic heart diseases	Pneu	Pneumonia	Brig	Bright's disease	Violence excl. suicide	Violence cel. suicide
period	Popula- tion	Deaths	Rates per 1000	Deaths	Rates per 100000	Deaths	Rates per 100000	Deaths	Rate: per 100000	Deaths	Rates per 100000	Deaths	Rates per 100000	Deaths	Rates per 100000
MALES All ages	8078904	52502	17.1	5969	170 9	1493	20 00	4004	1001	7 80 8	0000				
				0000	410.0	1.201	40.0	4224	1.69.1	6274	203.8	2882	93.6	8054	99.5
Under 10 10-14 15-19 20-24	800080 841529 819317 276508	22127 797 1215 1592	27.7	324 324 598	28.4 10.2 101.5 216.8	27 6 10 17	8.1.8 1.8	182 92 109	22.7	8741 61 106	17.9	22 18	6.6	722 148 201	90.2 48.3 62.9
25-44	818583	8195	10.1		352.0	151	18.6		65.0	749	92.1	10	2.61	892	110.0
65-84	105332	8293	78.7		262.1		150.0		816.3	781	189,6	-	267.2	531	128.9
85 and over Unknown	4330	1174	271.1		16.1		16.1		4873.0	02	1824.5		2355.7	42	970.0
EMALES														4	¥ ¥
All ages	3158669	45034	14.3	3461	9.601	2557	81.0	8894	123.3	5310	168.1	2466	78.1	1111	94.9
Under 10	787961	18674	23.7		20.6			165		8125	396.6		1-	424	10
15-19	339340	1060	24 ex	-	27.1			101		69	20.3		7.4	36	10.6
20-24	298995	1472	4.9	557	186.3	12	0 <del>4</del>	x 0.00	90.00	4 5	525.4	29	80 -		11.5
25-44	850657	6268	4.7	-	193.3					-	54.7	-	59.2		14.5
65-84	119695	8995	16.6	_	111.1						130.3		208.6	122	28.8
85 and over	6137	1523	248.2		32.6				1359.3	*	683.4		680.9		193.8
Unknown	2154	xG	8 6								1.0000		12.444.00		2 2 2 2 2 3

Table 4.—Deaths of persons born in Russia and rates per 100,000 for the principal causes of death, by sex and by age period: New York state, 1916.

		Alle	All causes	Tuber of h	ruberculosis of lungs	Cancer		Organic heart diseases	inic	Pneu	Pneumonia	Brig	Bright's disease	Violence excl. suicide	Violence tel. suicide
Sex and age period	Popula- Deaths	Deaths	Rates per 1000	Deaths	Rates per 100000	Deaths	Rates Per 100000	Deaths	Rates 100000	Deaths	Rates per 100000	Deaths	Rates per 100000	Deaths	Rates per 100000
MALES															
All ages	204298	2278	10	349	114.7	210	0.69	240	78.9	247	81.2	199	65.4	209	68.1
Un 3er 10	17045		4.4	4	23.5			1	20		20.4	-	K		70.4
10-14	17128	27	1.6	21	11.7	. ,		110	20.5	1 00	12.0	40	11.7	2 2	95.0
15-19	26432		2.6	16	60.6			000	30.3		1		- OC		200.0
20-24	51858		90	90	96.4	-1	13.5	9	11.6		86.6		200	44	2.48
25-44	148567		6.1	174	117.1	51	004.00	9	40.4	92	61.2	66	24.9		65.3
45-64	88558		20.1	95	246.4	107	277.6	86	254.2	30	228.2		238.6		80.4
65-84	4386	344	78.4	00	182.4	45	1026.0	55	1254.0	44	1003.2	99	1822.4		205.2
85 and over	129	00	255.8					-	5426.4	21	1550.4		4651.2	90	2325.6
Unknown	130	1								-	5263				
EMALES															
Al ages	254659	1675	6.6	190	74.6	177	69.5	217	85.2	153	60.1	184	72.3	62	24.3
Under 10	16812	63	60			,		6	11.9	1.4	00			ď	10
10-14	17448	24	1.4	-	5.7			11-	40.1	7	9.00			00	11 5
15-19	82186	57	1.8	6	28.0	-	00	00	00	46	126.0			-	17.0
20-24	48174	142	2.9	25.50	88.7	-	2	12	80.9	-10	14.4		19.4	2 00	10.0
25-44	103107	547	5.3	108	104.7	22	55.3	45	48.6	3.4	33.6		21.0	100	18.4
45-64	32160		16.0	56	80.8	95	284.1		239.4	15	158.6	0.00	97.8 T	14	49.5
65-84	4240		8.69	4	94.8	26	618.9		485.8	400	801.0	-	1979 6	X	188.7
85 and over	128		257.8						4687 5	100	8906.8	-	9242 X	200	1589.5
Unknown	10.6									0	arana a		D.O.K.O.	-	0.300

show a tuberculosis death rate of 104.7 per 100,000, as against These differences in the death rates from tuberculosis are alone sufficient to explain the advantageous mortality which we have observed for the Russians. The direct relationship between the low tuberculosis mortality and the large representation of Jews among the Russian born is unmistakable, and this conclusion accords with the work of a number of other writers. Körösy determined, for the city of Budapest, a tuberculosis mortality among Jews of 184 per 100,000, whereas the rate was 470 for Catholics and 331 for Calvinists. In both sexes and at all ages up to the end of the age period "25-44," pneumonia is markedly lower among the Russians in New York state; thus, at ages "25-44" the pneumonia mortality among Russian born males was 51.2, while the corresponding figure for native Americans was 92.1. This is again in agreement with Körösy, who reports the favorable position of the Jews as to pneumonia. Bright's disease, however, is higher among Russians in the later age periods, which are the more significant ones for this disease. The cancer rate is higher among Russian males in the period between 25 and 85; at ages "25-44" they have a death rate of 34.3 per 100,000 while that for natives from this cause is only 18.6. In the age period "45 to 64," the cancer rate is 277.5 for the Russians against 150.0 for the native born. The death rate of Russian females in the age class "25-44" is 55.3, while that of Americans is only 50.9; thereafter their rates are slightly lower, but the actual number of deaths, particularly those after age 65, are scarcely large enough to warrant any general conclusion. The low death rate from violent causes points to the fact that the Russian population does not commonly engage in those occupations in which this danger threatens: thus at ages "25-44" there were 65.3 deaths per 100,000 Russian males as opposed to 110.0 per 100,000 natives from these causes.

#### Italians

The Italians are more homogeneous than the Russians, although there is a larger representation of southern Italians and Sicilians among the Italians in New York state than is the case in Italy. According to the 1910 census, the number of persons of Italian birth in New York state was 472,192. This was 17.3 per cent of the foreign born whites and 5.3 per cent of the total white population in the state. This number is large, in view of the recent date at

1916]

which the Italian immigration began. Thus in the year 1890 the number of foreign born Italians in New York state was only 64,141. The tide of Italian immigration in this country rose subsequently to this date.

The mortality of Italians in their native land is a favorable one. In certain age periods, such as 35 to 64, the rates in 1900 and 1901 (the last figures available) were even lower than those for England and Wales (although, taken as a whole, the mortality of Italians is higher than that of the English). The figures which we have for Italians in their native country justify the conclusion that mortality conditions of persons of Italian birth are on the whole better in New York state than in Italy. The following table (Table 5) presents the mortality rates for this nationality, contrasted with those of the native born of native parentage, in New York.

Apart from the first age period, the figures for which are, as shown above, incomplete, the rates for the Italian males are higher than those for native males through the period "20-24." At the ages "25-44" and "45-64" the two sets of figures are very nearly the same; thereafter—that is, from 65 upward—the Italian males show a lower mortality, but the number of persons at those higher ages is too small to justify drawing any conclusions.

The Italian females in New York state show, on the whole, a Table 5.—Deaths per 1,000 white population among persons born in Italy, and among native born of native parentage, by sex and by age period: New York state, 1910.

	MALE	5	FEMALE	S
Age period	Native born of native parentage	Italian born	Native born of native parentage	Italian born
All ages:				-
Crude rate	15.9	9.2	13.9	9.7
Ages 10 and over:				
Crude rate	13.8	9.0	12.4	9.5
Standardized rate	13.8	12.9	12.4	13.7
Under 10	23.5	13.1	19.6	12.7
10-14	2.5	2.7	2.6	3.4
15-19	3.6	5.5	3.2	5.7
20-24	5.0	6.2	4.7	6.1
25-44	6.9	6.6	5.7	7.0
45-64	18.8	19.3	14.3	17.9
65-84	77.3	64.6	68.2	63.8
85 and over	268.9	120.3	242.3	214.3

higher mortality than the males. This is a remarkable condition, in view of the fact that the reverse relation of the sexes usually obtains. The Italian females also show a higher mortality than the native born females of native parentage; this is true in every age period through "45-64." After age 65 the Italian females are somewhat lower than the native females of native parentage, but here again the number of cases is too small to merit consideration.

Eliminating the first age period, and considering the rest of life as a whole, the crude rates for Italian males and females are 9.0 and 9.5 respectively. Standardized on the basis of the age distribution of the native born of native parentage, these rates are increased to 12.9 and 13.7. They are to be contrasted with the rates 13.8 and 12.4, respectively, for the native born of native parentage. We may say, then, that the Italians present favorable mortality rates. This is especially true of the males.

When we consider the causes (Table 6) which go to make up this mortality we find pneumonia, all forms, especially prominent. In practically every age period the pneumonia death rate for Italians is about twice that of native Americans; sometimes the proportion is even greater. The differences are especially marked among women. Thus at ages "25-44" Italian females have a rate of 81.5 per 100,000; the corresponding figure for native Americans is only 54.2. This suggests what has, indeed, been pointed out by Guilfoy, Stella, and other observers—a high prevalence of the acute infections which, especially at the older ages, terminate in the pneumonias and are reported under the last designation. In pulmonary tuberculosis, Italian males are at a decided advantage between ages 20 and 64-a period which includes the years most significant for this disease. Among the women, on the other hand, conditions are quite different. Almost in every period of life, and particularly at the early ages, they are at a marked disadvantage. At ages "20-24," for example, there is a mortality from pulmonary tuberculosis of 247.7 among Italian women, as opposed to 186.3 among native American women. When we contrast these figures with those of the men, who, at ages "20-24," show a rate of only 140.4 (while that of Americans is 216.3), it becomes clear that the unfavorable general mortality of Italian women is due primarily to pulmonary tuberculosis. In respect to organic diseases of the heart, the men show a uniformly low rate. This record is again in marked contrast

with that of the women, who, upon comparison with native Americans, are at a considerable disadvantage in every age group except the last. Accidents are strikingly frequent among Italians, in both sexes, and in practically every age group. The

		All causes	uses	Tuber of the	Tuberculosis of the lungs	Organic heart diseases	inic	Pneumonia	nonia	Bright's disease	Bright's disease	Violence (excl.suicide	ince iicide)
Sex and age period	Popula- Deaths	Deaths	Rates per 1000	Deaths	Rate: per 100000	Deaths	Rates per 100000	Deaths	Rates per 100000	Deaths	Rates per 100000	Deaths	Rates per 100000
MALES													
All ages	285485	2621	9.5	320	112.1	227	79.5	438	153.4	155	64.3	452	158.4
Under 10	12072	158	13.1	I	OC.			4.4	864.5		,	21	174.0
10-14	13211	36	2.7	57	15.1	00	22.7	0	87.8	-	2.6	=	83.3
15-19	25274	139	5.5	27	106,8	-Jr	15.8	18	71.2			41	162.2
20-24	46303	287	6.2	65	140,4	0	10.8		88.5	9	18.0	13	170.6
25-41	143160	946	9.9	146	102.0	69	41.2		85.2	45	81.4	223	155.8
45-64	41066	792	19.3	7.1	172.9	103	250.8		394.5		172.9	6:9	168.0
65-84	5867	248	64.6	00	208.6	09	1303,1		1198.9	03	807.9	8	156.4
85 and over	183	16	120.3			00	2255.6			-	751.9	21	1503.8
Unknown	0010												
FEMALES													
All sges	186757	1818	9.7	299	160.1	252	184.9	272	145.6	122	65.3	09	32.1
Under 10	11753	149	12.7	4	34.0	1	80	46	891.4			18	153.2
10-14	12847	42	60	11	89.1	9	48.6	+	82.4			00	24.3
15-19	19947	114	5.7	44	220.6	9	30.1	10	50.1	63	10.0	10	25.1
20-24	29473	179	6.1	200	247.7	15	6.09	17	57.7	03	6.8	9	20.4
25-44	80990	299	7.0	129	159.3	53	65.4	99	81.5		39.5	13	16.1
45-64	28375	809	17.9	98	123.3	106	378.6	75	253.7		211.5	13	458
65-84	3638	282	63.8	37	55.4	09	1649.8		1429.4	20	549.8	21	55.0
85 and over	126	27	214.3	_	793.7	0	8968.8	2	8968.3	9	4761.9		
Transmin.	400												

FABLE 8.—Deaths of persons born in Germany and rates per 100,000 for the principal causes

rates are particularly high among males. Thus at ages "20-24" there was a death rate from these causes of 170.6 per 100,000, while the corresponding figure for natives was only 96.9.

#### Germans

Foreign born Germans do not now constitute as large a part of the foreign born population of New York state as they did in the decade beginning 1880, when the high water mark of German immigration was reached. The Germans, however, still form one of the most numerous groups of the foreign born in New York state. This is especially true at the higher ages of life. In 1910 they were represented by 436,874 persons, constituting 16.0 per cent of the foreign born whites and 4.9 per cent of the total white population.

The mortality rates of Germans in their native country have been among the more favorable ones in Europe. In the last two decades the rates for the German Empire have shown very satisfactory improvement. It is, therefore, very surprising to find that in New York state the mortality of persons of German birth is fairly high, as is shown in the following table:

Table 7.—Deaths per 1,000 white population among persons born in Germany, and among native born of native parentage, by sex and by age period: New York state, 1910.

	MAL	ES	FEMAI.	ES
Age period	Native born of native parentage	German born	Native born of native parentage	German born
All ages:				
Crude rate	15.9	27.5	13.9	22.6
Ages 10 and over:	10.0	25.5	10.4	22.0
Standardized rate	13.8	27.7	12.4	22.8
Standardized rate	13.8	17.9	12.4	14.4
Under 10	23.5	19.7	19.6	10.3
10-14	2.5	5.8	2.6	1.6
15-19	3.6	3.4	3.2	2.7
20-24	5.0	4.5	4.7	4.0
25-44	6,9	10.0	5.7	6.3
45-64	18.8	27.7	14.3	18.4
65-84	77.3	90.4	68.2	83.1
85 and over	268.9	263.4	242.3	246.4

We must at the outset remark that the rates for the Germans in the first three age periods, as presented, have no particular merit, because of the small number of persons exposed. After

Table 8.—Deaths of persons born in Germany and rates per 100,060 for the principal causes of death, by sex and by age period: New York state, 1910.

		All causes	auses	Tuberculo of lungs	Tuberculosis of lungs	Can	Cancer	Organic heart diseases	iscases	Pnem	Pneumonia	Brig	Bright's disease	Suic	Suicides
Sex and age period	Popula- tion	Deaths	Rates per 1000	Deaths	Rates per 100000	Deaths	Rates per 100000	Deaths	Rates per 100000	Deaths	Rates per 100000	Deaths	Rates per 100000	Deaths	Rates per 100000
MALES															
All ages	225161	6195	27.5	602	267.4	200	222.1	944	419.8	574	254.9	154	334.9	207	91.9
Under 10	1891		12.7							00	428.1				
10-14	1894	11	5.8	1	52.8			03	158.4			-	52.3		
15-19	4403		8.4	4	8.06	* *	* * .		,			1	22.7		,
20-24	10898		4.5	9	45.9		*	*		9	45.9	1	9.5	4	36.
25-44	91474		10.0	231	252.5	007	40.4	69	75.4		94.0		67.8		53.6
45-64	85133		27.7		350.0	248	291.8	280	828.9	21	269.0	283	332.4		131.
65-84	28392	2568	90.4		211.8	208	732.6	541	1905.5	229	805.6	871	1306.7	30	137.
85 and over	646	250	263.4		210.7	-	737.6	61	5374.1		1896.7	534	3582.7		316.
Unknown	127	T			* *	* *		*				1	787.4		
EMALES															
All ages	211713	4792	22.6	244	115.3	999	264.5	840	396.8	434	205.0	581	274.4	47	22.2
Under 10	1936	20	10.3	1	51.7					00	155.0			*	
10-14	1864	00	1.6				* 1	-	53.6						
15-19	5203	7	Ni .		76.9	-	19.2	- 0	19.5		20. 4. 0.		19.2		19
20-24	12540	00	9.0		108.2				10.8		15.8		8.7		31.
20-44	24766	1001	20.03		129.1	65	61.9		40.1	000	20.00		45.5		200
45-64 65 84	20116	1001	82.4	30	109.7	088	778.7	520	1766.5	958	840 1	101	1199.8	10	22.1
85 and over	1246	307	246.4		80.3	11	882.8		4574.6	00	2728.7		1765.7		80
							-								

the age period "20-24" the figures are very ample, and may be considered entirely reliable. Beginning, then, with ages "25-44," we find that the rate for German males is very much higher than for the native born of native parentage, and this condition continues until the conclusion of the age period "65-84." The last age period, "85 and over," shows a slightly better rate than that for the native born of native parentage. In like manner, the females, beginning with the period "25-44," show higher rates than the native born of native parentage at every age period to the end of life. Considering together ages 10 and over, the crude rate is 27.7 for males and 22.8 for females; but when standardized as above outlined, the rates for the two sexes are reduced to 17.9 and 14.4, respectively. These are both distinctly higher than the rates for the native born of native parentage, the excess being more marked for males than for females.

In seeking to determine the causes for this high mortality (Table 8) we find that the pulmonary affections are to a large degree responsible; the degenerative diseases also play an important part. In view of the limitations of the material which have already been pointed out, and in view of the fact that most of the diseases in question have no considerable incidence before the attainment of maturity, we have concerned ourselves for the most part only with ages 25 and over. At almost every age, the pulmonary tuberculosis rates of German males are greatly in excess of those of native Americans; for example, at ages "45-64" there is mortality of 350.0 per 100,000 among Germans from this cause, while the rate is only 262.1 among natives. The position of the women with regard to pulmonary tuberculosis is favorable throughout practically the whole of life. In virtually every age class pneumonia has a higher death rate among German males than among the native born; the same is true for females. Sometimes the differences are very marked, particularly in the case of men; thus at ages "45-64" males of German birth have a pneumonia rate of 269.0 per 100,000, while the corresponding rate for native Americans is only 189.6. German males have a higher mortality from heart disease from age 25 upwards; the same is, in general, true of women, although they have a slight advantage over natives at ages "25-44." In the age period "45-64" German males have a death rate of 328.9 from heart disease, whereas that of the native born is only 316.3; the corresponding figures for the female sex are 288.5 for Germans and

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247.1 for Americans. With respect to Bright's disease, German males are consistently at a disadvantage throughout all the significant age groups; the same is true of females beginning at age 45. Thus at ages "45-64" the mortality of German males from this cause is 332.4 per 100,000; the corresponding mortaity for native Americans is 267.2. In the next age class the mortality of Germans is 1306.7, while that of natives is only 952.2. Cancer is more frequent at ages "25-84" among German men, and at ages 25-64 among German women. The differences are strikingly large among males; at ages "45-64," for example, the mortality of German men is 291.3 per 100,000, while that of natives is only 150.0. Suicide is also important; at ages 45-64 it accounts for 131.6 deaths per 100,000 German males, but for only 98.0 among natives. A high suicide rate among persons born in Germany has been pointed out by a number of observers.

#### Irish

Irish immigration into the United States attained its highest point as far back as 1851, but it has not ceased to be an important factor in our immigration since that date. In 1910 there were 367,877 persons of Irish birth in the state of New York; they formed 13.5 per cent of the total foreign born and 4.1 per cent of the total white population of the state.

In their own country the mortality rates of the Irish are higher than those of the English, especially for females, but they compare favorably, nevertheless, with those of other races of western Europe. In New York state, however, a surprisingly high mortality for the Irish appears to exist. This is shown in Table 9.

We may again eliminate from serious consideration all age periods below ages "20-24," because of the absence of Irish immigrants at the younger ages. Beginning with the period of "20-24," the males show a mortality almost twice that of the native born of native parentage. The rate is nearly three times as great in the next age period, "25-44," and continues to be in considerable excess throughout the rest of life, although the difference is not so marked in the period after 85. Females in the first period, "20-24," show no untoward condition. Beginning with "25-44," the rate is more than double that of the native

Table 9.—Deaths per 1,000 white population among persons born in Ireland and among native born of native parentage, by sex and by age period: New York state, 1910.

	MALE	8	FEM	ALES
Age period	Native born of native parentage	Irish born	Native born of native parentage	Irish born
All ages: Crude rate Ages 10 and over:	15.9	40.2	13.9	34.8
Crude rate Standardized rate	13.8 13.8	40.3 25.9	12.4 12.4	34.9 23.5
Under 10 10-14 15-19 20-24 25-44 45-64 65-84 85 and over	23.5 2.5 3.6 5.0 6.9 18.8 77.3 268.9	16,8 8.1 9.4 18.5 46.3 101.6 286.1	19.6 2.6 3.2 4.7 5.7 14.3 68.2 242.3	10.4 5.1 3.9 4.1 12.0 40.7 107.4 307.6

born of native parentage, and this very unfavorable mortality is maintained throughout the remaining age periods of life. Ages 10 and over, taken together, present a crude rate of 40.3 for the males and 34.9 for the females. These, when standardized for age periods, are reduced to 25.9 and 23.5 for the respective sexes. The rates are close to twice as high as those of the native born of native parentage. We may infer from the above figures that both male and female Irish born persons living in New York state show mortality rates which are much in excess of the corresponding figures for their own country; indeed, their mortality is not far from twice that recorded by the Registrar General of Ireland for similar age periods.

An examination of the causes for these very unfavorable conditions (Table 10) shows, in exaggerated form, a situation not unlike that determined for the German born population of the state. Tuberculosis and pneumonia, as also the degenerative diseases, play a prominent part. With regard to tuberculosis, the Irish born population of both sexes are at almost every age under a disadvantage even greater than that of the Germans. At ages "25-44," for example, there is a mortality from this cause of 662.9 among Irish born males, and of only 352.0 among natives; in the female sex the corresponding figures are 353.4 and 193.3. In both sexes and at all ages, pneumonia has a higher death rate

among the Irish born. The differences are again very large. At ages "25-41," for example, there is a rate of 211.2 per 100,000 among Irish born, but of only 92.1 per 100,000 among native Americans. Irish females in the same age class have a mortality of 110.0, while natives have a rate of only 54.2. Heart disease is strikingly high throughout all the significant age periods in both sexes. Thus at ages "45-64," where the mortality of native females is 247.1 per 100,000, that of the Irish born is more than twice as high—656.4. In practically every age period, and among both males and females, the same situation obtains with respect to Bright's disease and apoplexy and paralysis. In all ages up to age 84 Irish born males succumb to accidents in large numbers; at ages "25-44," for example, the death rate for this cause among males—263.7—was over twice as high as that of native Americans—103.0.

The above figures for both the German and the Irish strains in New York state help to explain some of the surprising conditions which we found in our discussion of the general death rates in Table 1. Thus, it will be remembered that, at ages "25-44," the native born males of foreign or mixed parentage—that is, first generation Americans—showed a death rate of 14.3 per thousand, while the mortality of the native born males of native parentage was only 6.9, and that of the foreign born males was only 8.7. The German and Irish are the predominating races included in the native born of foreign or mixed parentage in this age period, and it is doubtless their influence that accounts for this high mortality. The foreign born of the same age period, on the other hand, now largely composed of Russian Jews and Italians, present, as we have seen, much more favorable conditions.

# Austro-Hungarians

Austro-Hungarian immigration into New York state is comparatively recent, having become appreciable only since 1890. Recently, the number of those coming from this country has increased by leaps and bounds, and in the last few years they have represented one of the most numerous components of our immigration. In 1910 there were 341,846 Austro-Hungarians, who constituted 12.5 per cent of the foreign born whites and 3.8 per cent of the total white population.

Table 10.—Deaths of persons born in Ireland and rates per 100,900 for the principal causes of death, by sex and by age

Sex and age period         Population         Deaths per period point         Bates per period period         Deaths per per period         Deaths per per period         Deaths period         Deaths per period         Deaths period <th>Tuberculosis of lungs</th> <th>Organic heart diseases</th> <th>neart es</th> <th>Pneu</th> <th>Pneumonia</th> <th>Bright'</th> <th>Bright's disease</th> <th>Vio excl.</th> <th>Violence excl. suicide</th>	Tuberculosis of lungs	Organic heart diseases	neart es	Pneu	Pneumonia	Bright'	Bright's disease	Vio excl.	Violence excl. suicide
ges 155276 6241 40.2  r 10 714 12 16.8 628	Rates per 100,000	Deaths 10	Rates per 100,000	Deaths	Rates per 100,000	Deaths	Rates per 100,000	Deaths	Rates per 100,000
ges 155276 6241 40.2  r 10 628 18.8 1661 18 81 9471 1270 18.5 51019 2263 101.6 68641 1270 18.5 10.8 22169 2263 101.6 10.9 10.9 10.9 10.9 10.9 10.9 10.9 10.9									
F. 10 714 12 16.8 81 160.8 81 160.8 81 160.1 89 9.4 16.8 16.8 16.8 16.8 16.8 16.8 16.8 16.8	915 589,8	871	6.003	701	451.5	785	471.4	475	802 9
100   13   8   1   1   1   1   1   1   1   1   1		yest	140.1	1	140.1			-	140.1
1601   13   8   1     68641   1270   18.5     51019   2362   46.3     22169   2253   101.6     194   2   10.3     194   2   10.3     194   2   10.3     172   8   10.4     172   8   10.4     1724   3   4.1     1789   4.1     1789   4.1     1789   4.1     1789   4.1     1789   4.1     1789   4.1     1789   4.1     1781   120     18884   2606   40.7     1840   3187									
ges 212001 7398 34.8  r 10 772 8 10.4  r 10 772 8 4.1  r 10 772 8 7.24  r 10 7.24	5 812,8		10.00					21 2	124.9
ges 212601 7398 34.8  r 10 772 8 10.4  724 839 240 286.1  r 10 772 8 10.4  4311 17 89  1789 4.1  1789 4.1  1789 4.1  1789 4.1  1789 4.1  1789 4.1  1789 4.1  1789 4.1  1789 10.7  1899 7.4  1896 7.4  1899 7.4		01	21.1	2	52.8	÷	42.2	17.	258.4
ges 212601 2362 46.3 194 286.1 194 28.1 194 28.1 194 28.1 10.8 10.8 10.8 10.4 172 8 10.4 1724 8 4.1 1724 8 4.1 1724 8 4.1 1724 1121 12.0 187894 1121 12.0 187894 2606 40.7 29670 3187 107.4			90.3	145	2112	889	120.9	161	218 8
d over 839 2263 101.6  lown 194 2 10.3  ges 212001 7398 34.8  r 10 772 8 10.4  724 8 4.1  17894 171 12.0  18884 2606 40.7  220670 3187			580.2	307	601.7	9998	662.5	164	821.4
d over 839 240 286.1  ges 212001 7398 34.8  r 10 772 8 4.1  4311 17 8.9  1784 74 4.1  1789 2606 40.7  29670 3187 107.4	73 829.3	468 28	2088.5	227	1024.0	288	1299.1	06	406.0
r 10 772 8 10.4 4.1 4.1 1724 1121 12.0 63984 2606 40.7 10.4 4.1 12.0 63984 2606 40.7 10.4 10.4 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5		47 5	6.1099	91	0.7061	18	2145.4	00	857.6
r 10 772 8 10.4 7.24 1 17.8 4.1 8.9 17.8 4.1 8.9 17.8 4.1 8.9 17.8 4.1 8.9 17.8 17.8 17.8 17.8 17.8 17.8 17.8 17.8				:	:	I		:	
10 772 8 10.4 724 8 4.1 4311 17 8.9 17894 74 4.1 93674 1121 12.0 63984 2606 40.7 29670 3187 107.4									
724 8 10.4 724 3 4.1 1789 74 4.1 1789 74 4.1 98674 1121 12.0 68984 2606 40.7 2067 3187 107.4	587 276.1	1276	2 009	875	411.6	896	458.0	203	95.5
724 8 4.1 4311 17 8.9 17894 74 4.1 98674 1171 12.0 68984 2606 40.7 100.0		-	129.5	I	129.5			-	129.5
4811 17 8.9 17894 74 4.1 98674 1121 12.0 68984 2606 40.7 1 29670 3187 107.4				-	138.1				
98674 1121 12.0 8 68984 2806 40.7 1 29670 3187 107.4								-	28.2
98674 1121 12.0 8 68984 2606 40.7 1 20070 3187 107.4		00	8.91	4	22.4	21	11.2	7	11.2
63984 2606 40.7 29670 3187 107.4	-	-	100 3	103	110 0	110	117.4	520	81.0
29670 3187 107.4			656.4	222	523.6	407	636.1	19	104.7
000 0001	57 192.1	686 23	2812.1	895	1331.3	412	1388,6	16	2 908
7547 767			1.76	98	2898,6	200	2576.5	75	2.996
Unknown 330					, ,				

As was observed for the Russians, this nationality is likewise heterogeneous, containing large proportions of Jews, Germans, and Slavs. According to the report of the Immigration Commission, 7.8 per cent of those entering the United States from Austria-Hungary are Jews. This percentage is much too low when considered with reference to New York state, where the proportion of Jews from Austria is notably high. We must consider this fact in order to appreciate the mortality conditions which will be shown below.

In Austria-Hungary the mortality rates are relatively high at all age periods, the figures being somewhere between those of Russia on the one hand and those of Germany on the other. The mortality of Austro-Hungarians is apparently much better in America, as is shown by the following figures:

Table 11.—Deaths per 1,000 white population among persons born in Austria-Hungary and among native born of native parentage, by sex and by age period: New York state, 1910.

	34	ALES	FEMALE	8
Age period	Native born of native parentage	Austro- Hungarian born	Native born of native parentage	Austro- Hungarian born
All ages:				
Crude rate	15.9	9.3	13.9	7.4
Ages 10 and over:				
Crude rate	13.8	9.4	12.4	7.3
Standardized rate	13.8	14.3	12.4	12.4
Under 10	23.5	7.4	19.6	8,2
10-14	2.5	2.8	2.6	1.6
15-19	3.6	4.1	3.2	2.0
20-24	5.0	4.3	4.7	3.5
25-44	6.9	6.7	5.7	5.8
45-64	18.8	21.0	14.3	18.2
65-84	77.3	77.5	68.2	63.9
85 and over	268.9	301.6	242.3	213.5

The first two age periods, "under 10" and "10-14," must be disregarded because of the paucity of data. Beginning with the period "15-19," and continuing throughout the rest of life, the rates for the Austrian males fluctuate slightly above and below the rates for the native males of native parentage. The Austrian females in the two periods "15-19" and "20-24" show more favorable rates than the natives of native parentage. In the next age period, "25-44," the two sets of figures are virtually identical.

Table 12.—Deaths of persons born in Austria-Hungary and rates per 100,000 for the principal causes of death, by sex and by age period: New Fork state, 1910.

		Alle	All causes	Tuberculosis of	erculosis of	Car	Cancer	Deart diseases	iseases	Pneur	Pneumonia	Bright's	Bright's disease	exel.	excl. suicide
Sex and age period	Popula-	Deaths	Rates per 1000	Deat	Rates per 100,000	Deaths	Rates Per 100,000	Deaths	Rates per 100,000	Deaths	Rates per 100,000	Deaths	Rates per 100,000	Deaths	Rates 100,000
MALES													9	1	-
All ages	177122	1645	8.6	294	166.0	115	64.9	153	86.4	143	80.7	163	92.0	22.0	
Under 10	5978	44	7.4	-	16.7	T	16.7			10	167.3	+4	16,7	9 00	113.1
10-14	7073	50	2.8	-	14.1		. 1	21 -	28.00	7.9	43.9	. 6	14.6	1.4	102 4
15-19	18670		4.1	1.4	102.4	_	7.0	4 10	17.0	0 0	20.0	1 -	8.6	88	139.7
20-24	27912		4.5	502	98 1	40.0	14.6	98	49.1	41	43.8	383	85.2	112	119.5
25-44	93698		6.7	166	177.2	6.1	20.0	63	544 5	209	998.8	2.2	298 6	570	112.5
45 64	25786		21.0	78	302.5	19	259.8	00	1069 3	16	566.6	46	1628.9	x	283,8
65-84	2824		77.6	2	247.3	777	1587.2	000	4761.9	57	8174.6	00	4761,9		
85 and ever	63	6:1	301.6		,	-	1001								
Unknown	118						:		*						
FEMALES													1	00	0.00
All ages	164714	1213	7.4	169	102.6	138	80.00	127	17.1	113	68.6		67.70	99	20.1
	China	400	0.0					1	16,6	12	199.6	:		G1	99.99
Under 10	2002	100	10		19.7			00	41,1	1	18.7				
10-14	1299		0.0		40.0	, ,	4.5	****	4.5	4	18.0		4.5	4 :	10.01
15-19	22191	95	2.0	11	0100	-	0.5	10	30 3	00	24.8	4	12.1	,	1.6
20-24	32981	111	6.6	7.7	6.10	100	40.0	66	42.9	250	43.9	27	87.0	20	2
25-44	72906	422	8.9	100	187.2	64	9000	45	991 3	500	172.1	49	241.0	10	49.2
45-64	20334	870	18.2	25	122.9	80	235 4	640	1100 0	18	639.4	24	852.6	0	177.6
65.84	2816		63.9	4	142.1	71	146.0	0.0	8 0233	6	9947.9	12	5618.0		* *
85 and over			213.5			-	1123 6	0	0.0100	ı					
Unknown				,											

In the period "45-64" the Austrian females show higher rates, while at ages "65-84" the relationship is reversed. The figures for the last age period may be disregarded because of insufficient numbers.

On examining the causes of death of this nationality (Table 12). we find a surprisingly large number of deaths from violence (excluding suicide). This may be attributed to the unskilled and perilous occupations in which immigrants from Austria-Hungary engage to a very large degree. The disadvantage of these people, as opposed to native Americans, is apparent in almost every age class and in both sexes; it is particularly striking and consistent among males. Thus at ages "20-24" the mortality from these causes was 139.7 among Austro-Hungarians and only 96.9 among natives. The deaths from these causes formed 32.2 per cent of all deaths of Austro-Hungarian males at ages "20-24" and only 16.8 per cent of the total deaths among the native born in New York state. In the later years the rates for cancer and Bright's disease are also higher in both sexes. For example, among males aged "45-64" there was a cancer mortality of 259.8 per 100,000 among Austro-Hungarians, in contrast with only 150.0 among native Americans.

## English, Scotch, and Welsh

Immigration from England, Scotland, and Wales into the state of New York has been of secondary importance in comparison with the great wave of immigration from eastern and southern Europe. In 1910 there were only 193,359 of these stocks in New York state, constituting 7.1 per cent of the foreign born and 2.2 per cent of the total white population of the state. So light has been the immigration from these countries in recent years that the total number under age 25 is too small to give reliable death rates.

The mortality rates of England, Scotland, and Wales are among the most favorable in Europe. Moreover, the fullness of the official returns from these countries makes comparisons readily possible with the corresponding figures found in New York state, which are presented herewith (Table 13).

For reasons indicated above we shall not consider the death rates in the first four age periods in this table. In the age period "25-44" there is a considerably higher mortality for the British males than for the native born of native parentage. This

Table 13.—Deaths per 1,000 white population among persons born in England, Scotland, and Wales, and among native born of native parentage, by sex and by age period: New York state, 1910.

	MAL	ES	FEMALE	3
Age period	Native born of native parentage	English and Scotch born	Native born of native parentage	English and Scotch born
All ages:				
Crude rate	15.9	21.8	13.9	20.6
Ages 10 and over:				
Crude rate	13.8	22.6	12.4	20.8
Standardized rate	13.8	16.6	12.4	15.8
Under 10	23.5	7.0	19.6	0.0
10-14	2.5	3.7		6.0
15-19	3.6	5.8	2.6	3.3
20-24	5.0	4.3	3.2	5.8
25-44	6.9	8.7	4.7	3.8
45-64	18.8	24.6	5.7	7.6
65-84	77.3		14.3	21.0
85 and over	268.9	86,6	68.2	79.9
	200,0	261.9	242,3	279.6

condition continues throughout the period "45-64." In the last period the rates are very much the same. In the age period "25-44" the British females likewise show a higher mortality than do the native born of native parentage, and this condition continues throughout the rest of life. Considering all ages, 10 and over, the crude rate for males is 22.6 and for females 20.8. Standardized rates are respectively 15.6 and 15.8, which are considerably higher than the corresponding figures 13.8 and 12.4 for the native born of native parentage. It is difficult to understand why the mortality of the British in New York state should be so much higher than that found in their own country.

No group of causes (Table 14) stands out with such prominence as to enable us to draw any general conclusions, and, indeed, the basic figures before age 25 and after age 64 would scarcely be large enough to justify them. It may be interesting, however, to note that pneumonia is higher among British males at ages "25-84" and among females at all ages beginning with age 25, than among natives. At ages "45-64," for example, there is a mortality, from this cause, of 252.7 per 100,000 among males born in England, Scotland, and Wales, but of only 189.6 among native Americans; the corresponding figures for females are 199.7 and 130.3, respectively. Cancer is higher among British males in all age groups beginning with age 45, and among British females at ages "25-84." Thus there is a rate at ages "45-64" of 239.7 per 100,000 among males of this stock,

Table 14.—Deaths of persons born in England, Scotland, and Wales and rates per 100,000 for the principal causes of death,

Popula- tion         Deaths         Rates per 1,000         Deaths         Rates per 1,000         Deaths         Rates per 1,000         Deaths         Per 1,000         Per	Sex and aga		Alle	All causes	Tuberc	Tuberculosis of lungs	Car	Cancer	Org.	Org. beart diseases	Pneu	Pneumonia	Bright's disease	disease
Fr 10 4274 30 70 1 23.4 145.5 331 825.3 207  Fr 10 4274 30 70 1 23.4 1 145.5 331 825.3 207  8 3108 18 5.8 4 128.7 2 64.4 1 82.2 1  8 48243 378 87 104 240.5 6 13.9 30 69.4 43  8 48243 378 87 104 240.5 6 13.9 30 69.4 43  8 48243 378 87 104 240.5 6 13.9 30 69.4 43  8 48243 378 87 104 240.5 6 13.9 30 69.4 43  8 48243 378 86 21 210.3 59 590.9 190 1908.0 70  8 6 71 20.3 113 123.3 205 223.8 318 341.7 188  8 71 21.0 4307 28 6.8 113 123.3 205 223.8 318 341.7 188  8 8 121.5 28 8 121.5 29 67.0 23  8 8 121.5 29 67.0 3 4 16.7 21.0 24  8 8 121.5 29 180 77 1205.6 52  8 8 121.5 29 180 77 1205.6 52  8 8 121.5 29 180 77 14 88  8 8 121.5 29 180 77 180 82  8 8 121.5 29 180 77 180 82  8 8 121.5 29 180 77 180 82  8 8 121.5 29 180 77 180 82  8 8 121.5 29 180 77 180 82  8 8 120.5 29 180 77 180 82  8 8 170 279.5 1 164.5 2 328.9 26 4276.8 25	period	Popula- tion		_		Rates per 100,000	Deaths	Rates per 100,000	Deaths	Rates per 100,000	Deaths	Rates per 100,000	Deaths	Rates per 100,000
Fr 10 4274 30 7.0 1 23.4 7.	ALES								The same of the sa					
Fr IO 4274 30 7.0 1 23.4	Allages	101749	2217	21.8	219	215.2	148	145.5	331	825.8	207	208.4	205	201.5
10048   100   10   10   10   10   10   10	Under 10	4274	30	7.0	-	93.4					E	1000		
10048   18   5.8   4   128.7   2   64.4   1   37.2   1   1   1   1   1   1   1   1   1	10-14	2712	10	20.71		38.9			. 00	110 6		100.0		*
1	15-19	3108	18	5.8	4	1987	. 6	64.4	-	29.0		0 00		
Herer	20-24	6991	30	4 55	15	71.5	- 1	14.8	4	1		2.20		
dover         30867         759         246         83         268.9         74         239.7         84         272.1         78           dover         485         127         261.9         21         210.3         59         690.9         190         190         70           cown         85         127         261.9         1         210.3         59         190         190         70           ges         1127         261.9         1         210.3         1         22         1         22         1         22         1         22         1         22         1         22         1         22         1         22         1         22         2         4         60.7         2 <td>25-44</td> <td>43243</td> <td>87.50</td> <td>200</td> <td>104</td> <td>240.5</td> <td>2</td> <td>12.0</td> <td>. 30</td> <td>60.4</td> <td></td> <td>19.0</td> <td></td> <td></td>	25-44	43243	87.50	200	104	240.5	2	12.0	. 30	60.4		19.0		
d over         4865         88.6         21         210.3         59         590.9         130         1503.0         70           nown         85         127         261.9          6         1237.1         23         4742.3         7           ges         91610         1886         20.6         113         123.3         205         223.8         318         341.7         188           r 10         4307         28         6.0         1         23.2         1         23.2         1         4         146.7            s 205         25         38         2         64.0          1         4         60.7         3           s 204         28         7.6         8         121.5          1         23.2         3         4         60.7            s 204         28         2.6           4         60.7           2         2         2         2         2         2         2         2         2         2	45-64	30867	759	24 6	800	268.9	7.4	289.7	X4	979.1		920.4	020	960.6
d over         485         127         261.9	65-84	1866	865	86.6	21	210.3	20	6.069	180	1908.0		701 1	000	200.0
ges 91610 1886 20.6 113 123.3 205 223.8 313 341.7 188 r 10 4307 28 6.0 1 23.2 1 23.2 1 23.2 1 23.2 2 3.3	85 and over	485	127	261.9			9	1237.1	23	4749.8		1442.9	30	0001.9
ges 91610 1886 20.6 113 123.3 205 223.8 313 341.7 188 r l	Unknown	28										0.0221	nr .	2007
91610         1886         20.6         113         128.3         205         228.8         818         841.7         188           2727         28         6.0         1         28.2         1         28.2         1         28.2         2         2         2         2         2         2         2         2         2         3         4         4         4         4         4         4         4         4         4         4         4<	MALES													
10 4307 26 6.0 1 28.2 1 28.2 1 28.2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Allages	91610	1886	20.6	113	123.3	205	223.8	313	841.7	188	205 2	176	192.1
2727 9 8.3	Under 10	4307	26	6.0	-	93.9	-	95.9		0 00	G	* 0.0		
3126 18 58 2 64.0	10-14	2727	6	00		1	,	#O. #		146.7	14	40.4		
6585 25 3.8 8 121.5	15-19	3126	30	82	. 6	64.0				0.00			* * *	
88094 288 7.6 63 1654 22 57.8 20 52.5 21 25045 547 21.0 24 92.1 94 860.9 77 295.6 52 11 10ver 608 170 279.6 1 164.5 2 828.9 26 4276.8 25 4	20-24	6585	255	00	100	191.5			*	0.00	0	0.00		
26045 547 21.0 24 921 94 860 9 77 295.6 52 10048 803 79.9 14 189 3 86 855.9 180 17914 83 4276.8 25 4276.8 25 4	25-44	38094	288	7.6	653	165.4	66	21.8	000	2002	2 6	80.4		15.2
10048 803 79.9 14 1393 86 855.9 180 17914 83 85 825.9 26 4276.8 25 4	45-64	26045	547	21.0	24	92.1	0.4	860.9	_	905 8	122	1.00	87	43.3
lover 608 170 279.6 1 164.5 2 828.9 26 4276.3 25	65-84	10048	803	79.9	14	129.3	X	0000		1701.4	200	133.1	500	241.9
000 00000000000000000000000000000000000	85 and over	809	170	279.6		164.5	6	898.9	_	4976.2	000	0.020	999	826.0
	Unknown	7.0					1	0.0000	-	0.010	0.7	*111.0	10	1.544.1

in contrast to 150.0 among native males; the mortality of British females from this cause is 360.9, while that of natives is 287.4. Heart disease is higher among males at ages "25-44" and "65-84," and among females at all ages beginning with age 45. Bright's disease is likewise higher among females at ages "45-84."

### Summary

The lowest mortality rate in the population of New York state is found among the native born of native parentage. This is true for both sexes and for virtually every age period, but is marked at the adult ages. The foreign born and their native born fispring agree much more closely with each other than they do with the native born of native parentage. There are marked variations, to be sure, in the several age periods and in the two sexes, but the first generation Americans and the foreign stock from which they have arisen show unmistakably their close connection. The death rates of the component races among the foreign born present very marked variations. Remarkably low rates are found among the Russians, and this is largely accounted for by the presence of a large proportion of Jews among them. The Italians follow very closely with exceptionally low rates of mortality, although Italian females at certain age periods show rather unfavorable conditions, especially from the respiratory diseases. The remaining races may be arranged roughly in the following increasing order of mortality: Austro-Hungarians, British, Germans, and Irish. Of these four nationalities, the first appears to be the only one whose mortality in New York state is more favorable than that prevailing in the native country. The very high rate of mortality among the Germans and especially among the Irish is one of the surprising facts of this study. Apparently it is the very high incidence of pulmonary tuberculosis that is largely responsible for this condition, although the degenerative diseases also present rates much in excess of those for the native born of native parentage or for the same nationalities abroad. These facts are clearly indicative of unfavorable conditions of life and work among the peoples in question, and point definitely to the need of special public health work by the state and various city departments of health for these groups of the population. A large number of unnecessary deaths would readily be prevented by a concerted effort carried over a period of years.

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# COLLECTIVE BARGAINING IN THE GLASS BOTTLE INDUSTRY<sup>1</sup>

The agreement between the Glass Bottle Blowers' Association and the National Glass Vial and Bottle Manufacturers' Association furnishes an impressive and an instructive exhibit of the feasibility of carrying on for a long term of years a peaceful and mutually agreeable system of collective bargaining. While friction between the parties to the agreement has at times been great and while the agreement has often been almost at the breaking point, yet so enlightened has been the policy of the representatives of both the union and the manufacturers' association in granting concessions and in yielding upon disputed points, that the agreement has operated, in one form or another, for almost a quarter of a century. Nor have external conditions been particularly favorable to the continued life of the agreement. The technical revolution of the industry, beginning in the middle nineties with the installation of the so-called "semiautomatic" machine and intensified after 1900 by the invention and the later extensive use of the Owens automatic machine for the manufacture of glass bottles, has presented to the conferences of the manufactures and their employees problems that every year become more perplexing and more difficult of solution. The promulgation of working rules to govern those members of the union who were employed on the semi-automatic machines, the regulation of the wage scale so as to retain a fair wage for the glass blower and at the same time to permit the employer of hand blowers to compete against the machine, and finally a new adjustment of wage scales designed to meet the competition of the automatic, are a few of the problems which have received at the hands of the annual conference, if not a perfect solution, at least a workable settlement.

# History and general description of the agreement.

The glass bottle blowers were organized originally not in one national organization but in the separate and independent Eastern and Western Leagues of Green Glass Bottle Blowers. In 1886

<sup>&</sup>lt;sup>1</sup>The material presented in this paper was collected by the writer while an agent of the United States Commission on Industrial Relations.

the Western League became affiliated with the Knights of Labor as District Assembly 143 of that organization and in the same year the Eastern League was affiliated as District Assembly 149. As early as 1886, also, there is record of annual conferences between the Eastern and Western Leagues of blowers and of loosely organized associations of Eastern and Western bottle manufacturers. The fact, however, that the organizations in these two sections of the country often worked at cross purposes and that concessions from the one would at times be used to force similar concessions from the other, coupled with the fact that the frequent passage of journeymen blowers from district to district made the disciplining of their membership difficult, soon led to a movement to amalgamate the Western and Eastern Leagues of Glass Bottle Blowers into one national organization.

In 1890, accordingly, the Eastern and Western Leagues united in one body under the title of the National Trade Assembly 143, Knights of Labor of America. And in July, 1891, the assembly withdrew from the Knights of Labor to become the Green Glass Bottle Blowers' Association of the United States and Canada. With the formation, then, of the national organization of glass bottle blowers in 1890, the sectional conferences of preceding years were succeeded by national conferences between representatives of the union and of the manufacturers.

During the first few years following the amalgamation, evidence of the conflicting interests of the Western and Eastern manufacturers could still be found. Thus, at the conference of 1890, although an agreement could have been effected with the Western manufacturers, the chairman of the conference stated that he could not promise that the Eastern manufacturers would be bound by the findings of the conference. Later, the Eastern manufacturers actually withdrew from the conference. Indeed, it was at that time the opinion of the officers of the union that the "Eastern and Western manufacturers were evidently trying to effect a settlement independently of each other to create discontent" in the ranks of the union.2 But since the union would treat only with a joint committee representing the manufacturers from both sections of the country, the manufacturers were unsuccessful in their efforts to revert to the earlier sectional conferences. With the gradual development of the machinery of

<sup>&</sup>lt;sup>2</sup>Proceedings of the United Green Glass Workers' Association of the United States and Canada, 1892, p. 13.

the conferences and with the growth in mutual confidence of the parties to the conferences, the conflicting interests of the different sections became less pressing and the manufacturers' association developed into a more compact and more homogeneous organization.

Prior to 1899 it had been customary to hold annually one wage conference either in the month of July or August, usually several weeks after the union and the manufacturers' association had held their annual conventions. But this system was soon found to be open to serious objections. A single annual conference at which were submitted by the conferees demands and counterdemands whose purport was known only to their sponsors precluded, in the judgment of both the manufacturers and their employees, that familiarity with the propositions which is essential to their intelligent consideration. The plan was therefore adopted of holding a preliminary conference in May at which would be submitted the demands of both parties.3 Those questions upon which there was little disagreement would be settled at this preliminary conference. The more debatable propositions would next revert to the annual conventions of both associations for further discussion and would then in July or August be submitted to the final conference for final disposition.

The value of such a preliminary conference was at once observed. President Hayes of the Glass Bottle Blowers' Association writes in 1900:

The amount of work done at the May conference this year in the way of listing bottles and discussing important questions proves that this preliminary meeting of the wage committees has become a vital necessity, unless, indeed, we are desirous of a protracted wage conference later on, or possibly two or three separate ones, which may be prolonged to such an extent as to delay or hamper the beginning of work in the fall. At the May meeting we hear the manufacturers' side of the story, and are, therefore, enabled to lay it before the convention for discussion and counsel. This is right and proper, as it is a matter of duty for us to view all questions from both sides, and it would be neither just nor safe for us to legislate with only a one-sided knowledge of matters upon which the trade depends so much for successful operation.

With the establishment and successful operation of the preliminary conference, elaborate rules, regulating the conduct of

<sup>\*</sup> Agreement-Blast, 1899-1900, sec. 40.

<sup>&#</sup>x27;Proceedings, Class Bottle Blowers, 1900, p. 47.

the preliminary and final conferences, were formulated. Of the rules regulating both conferences, the most important were (1) the rule providing that no question which had not been brought before the preliminary conference would be considered at the final conference and (2) the provision for the submission of questions by the parties to the conference.<sup>5</sup>

The agreements made before 1902 laid down the working rules and price lists for each year but made no provision for the adjustment of questions arising between the annual conferences. There was, to be sure, the rule stating that "all ware not specified in the list shall be rated at the same price and subject to the same rules, in regard to weight, as those specified in the list which they resemble in size, shape, weight, and finish." This clause did not, however, specify who was to settle disputes arising from disagreements in assigning new bottles to various brackets, nor upon whom was to devolve the duty of interpreting the many rules included in the annual agreements. This link in the agreement was supplied at the conference in 1902. At the suggestion of the manufacturers,6 the President of the Blowers' Association was chosen as the officer to whom "all information wanted in regard to the intent or meaning of rules and regulations shall be referred." It was further provided that his decision was binding until reported to and revised by the joint conference.7

As in the case of all matters included in the annual agreements between the bottle blowers' union and the bottle manufacturers, the rules providing a mechanism for the adjustment of disputes arising between the final conference of one year and the preliminary conference of the succeeding year have since 1902 undergone some modification and considerable amplification and exist at present in the following form:

<sup>\*</sup>The manner in which questions are submitted to the conference is described in the following clause of the agreement: "Manufacturers and branches shall notify each other of all bottles or changes intended to be submitted to the May conference, and the reason for so submitting them, which notice shall be in writing. The branches shall send such written notices to the President of the Glass Bottle Blowers' Association and the manufacturers shall send their written notices to the President of the National Vial and Bottle Manufacturers' Association." (Wage Scale and Working Rules—Glass Bottle Blowers' Association. Blast, 1914-1915, secs. 42-44.)

<sup>\*</sup> Proceedings, Glass Bottle Blowers, 1902, p. 47.

<sup>7</sup> Agreement-Blast, 1902-1903, rule 53.

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All information wanted in regard to the intention or meaning of the rules, regulations and prices shall be referred to the President of the Blowers' Organization, whose decision in all such cases shall be binding unless said decision is reversed by the Joint Wage Preliminary Conference in the case of a protest.

Manufacturers who desire to protest against a decision of the President shall serve notice in writing on the Branch in their locality of their intentions to protest, and shall also notify the President of both the Manufacturers' and Blowers' organizations of the protest; this notice shall contain all information necessary for a proper review of the case protested. Said notice shall be served not later than thirty days prior to the first day of the Preliminary Conference.

Protests on decisions made between April 1st and July 31st shall be reviewed at the Final Conference with notice as above stated, to be served no later than August 1st.

No case in protest shall be reviewed by either conference unless the foregoing has been fully complied with.8

Originally, when a clear line of demarcation existed between the flint glass bottle workers and the green glass bottle makers, the union of green glass bottle makers, the parent organization of the present Glass Bottle Blowers' Association, held wage conferences with the association of green glass bottle manufacturers. Later, however, with the introduction of the tank and the extension of its jurisdiction over all bottle makers whether blowing bottles from tanks or covered pots, the union held separate conferences with the green glass and with covered-pot manufacturers. At the conference of the representatives of the union with the representatives of the Flint Bottle Manufacturers' Association for the purpose of fixing prices and rules to govern the manufacture of covered-pot ware for the season of 1902-1903, the chairman of the conference, a manufacturer, stated "that in his opinion all matters pertaining to the making of bottles should be settled by one committee, but that while the blowers were practically all in one association, the manufacturers were unfortunately divided into two, hence" the necessity for two con-In the following year, therefore, the scope of the manufacturers' organization was widened, to include all persons engaged in the manufacture of glass bottles; and a subcommittee was thereafter annually appointed to consider questions that might arise between the covered-pot manufacturers and their employees. Now that the manufacturers of covered-pot ware have

<sup>\*</sup>Wage Scale and Working Rules-Glass Bottle Blowers' Association, Blast 1914-1915, sec. 45.

been admitted into the employers' association, the Glass Bottle Blowers' Association holds annually a preliminary and a final conference with the representatives of one manufacturers' association, the National Glass Vial and Bottle Manufacturers' Association. At these conferences there are drawn four distinct sets of price scales and working rules. (a) One governs the manufacturers and employees engaged in the hand manufacture of glass from the tank; (b) another governs the manufacture of covered-pot ware; (c) a third relates to rates and rules for the semi-automatic machine in the manufacture of wide-mouth ware; and the last (d) constitutes the wage scale and working rules governing the "United and the O'Neill and the one and two man narrow-mouth machines."

The essential features, then, of the agreement between the Glass Bottle Blowers' Association and the National Bottle Manufacturers' Association are:

a. The provision for annual preliminary and final conferences for the discussion and settlement of working rules and wage rates.

b. The machinery for the settlement of disputes arising between the conferences and for the review of these settlements.

c. The promulgation of price lists and working rules for the four divisions of the industry: the tank, covered-pot, semi-automatic wide-mouth, and semi-automatic narrow-mouth ware.

# The employers' association.

The National Glass Vial and Bottle Manufacturers' Association existed before 1890 as the Western and Eastern Associations of Green Glass Bottle Manufacturers. These associations were loosely organized bodies that existed principally for the purpose of holding wage conferences with the Eastern and Western Leagues of Green Glass Bottle Blowers. With the amalgamation of those organizations in 1890 the manufacturers effected a somewhat similar combination which apparently confined itself to the selection of representatives to the annual national wage conferences with the United Green Glass Bottle Blowers' Association. Later, upon the absorption by the Glass Bottle Blowers' Union of all branches of the trade, the employers' association similarly extended its jurisdiction. In the constitution revised and amended in 1902, it is stated that the association admits into membership "any person who manufactures glass vials and bottles in tanks

or open pots and employs workmen under the jurisdiction of the Glass Bottle Blowers' Association." An amendment to the constitution is now pending which would admit into membership "any person who manufactures glass bottles and jars, either from tanks or from open or covered pots."

The officers of the organization consist of president, vice-president, secretary, and treasurer elected annually by ballot and of an executive committee appointed annually by the president. This committee, together with the officers of the organization, constitute the representatives of the association at the annual conferences. Meetings of the association are held annually between the preliminary and final joint wage conferences and are occupied almost exclusively with the discussion of issues raised in the preliminary conference.

Although provision is made for tariff and railroad committees, 12 the organization has shown little activity in this direction.

The relations of the association and the Glass Bottle Blowers' Union have on several occasions been almost at the breaking point and several of the conferences have adjourned without reaching an agreement. The organization, however, has never become a hostile association and no record is extant of its having sanctioned, as an association, even isolated acts of hostility toward the blowers' organization. In a few cases, to be sure, it has been unable to prevent members from violating the agreement;

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Art. II.

<sup>&</sup>quot;Special Meeting, National Bottle Manufacturers' Association, May 26, 1914.

<sup>11</sup> Constitution, 1902, art. I.

<sup>13</sup> Ibid., art. III.

persistent violation would, however, result in the expulsion of the member from the association.

The association has never adopted any system of fines for the disciplining of its members either for the violation of edicts of the association or of the terms of the joint agreements. Nor did it have until recently any settled policy toward the union manufacturers not members of the association. For some time, such manufacturers were permitted to attend the conferences, to submit propositions, and to request reviews of the decisions of the president of the blowers' association. At the final conference in 1913, however, it was announced that the following resolutions had been adopted by the National Vial and Bottle Manufacturers' Association:

Whereas, There are a number of Bottle and Jar manufacturers throughout the United States and Canada, employing members of the Glass Bottle Blowers' Association who have heretofore received practically all the benefits derived from the action of the Joint Wage Conferences, without becoming members of the National Vial and Bottle Manufacturers' Association, or without contributing towards paying the necessary expenses connected therewith. Some have declared they would get along better without the association or without a Joint Wage Conference. Others declare there is nothing to be gained by membership in the organization so long as they are able to obtain the benefits therefrom without sharing in the expenses, and by not being members they argue that they are not bound by the action of the Joint Wage Conference, yet they gladly accept and make use of all decisions of said conference that pleases them, therefore be it

Resolved: That the members of our Executive Committee, when in conference with the workmen's committee, be and are hereby instructed to decline hereafter to consider any disputes, grievances, etc., or the listing of bottles, their prices or classifications or any other matters arising in a factory the management of which is in no way affiliated with the National Vial and Bottle Manufacturers' Association that may come before the Joint Conference either directly or indirectly, thus leaving all such matters to be decided by the President of the Glass Bottle Blowers' Association, whose decisions shall be final in so far as they pertain to the particular factory, but any decision he shall make in such cases shall not be construed as establishing a precedent, nor shall it be applied to, or be binding upon other factories, but it is understood that any decision thus rendered, shall upon application by any member of this association, be subject to review by the Joint Wage Conference.<sup>13</sup>

<sup>13</sup> Minutes, Final Conference, Manufacturers' Report, 1913, p. 4.

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These resolutions for a time nonplussed the representatives of the union. "While this was a rather extraordinary proceeding." writes the secretary of the blowers' association concerning these resolutions, "still we could not but agree with them in their contentions. Our association will, therefore, exercise its best judgment in dealing with those who do not belong to the abovementioned association, dealing as we have always done, fairly and impartially with all."14 The net effect of this action of the employers' association is to leave the independent union manufacturers in almost the same condition as before. They are granted by the union the same working conditions and the same prices as operate in the establishments of those manufacturers belonging to the organization. There is this difference, however, the independent manufacturers have no organization to which they can appeal for a review of the decisions of the president of the blowers' union.

The skilled branch of the glass bottle industry is about 90 per cent organized. During the nineties and the early part of the last decade strong non-union centers were to be found in New Jersey, western Pennsylvania, and Indiana. Vigorous organizing campaigns by the union resulted in the organization of many of the non-union plants; until today a high degree of organization has been reached. To a considerable extent, however, non-unionism still flourishes in the gas belt of Indiana and in Western Pennsylvania. Of the union manufacturers, the majority are members of the employers' association; and the resolution adopted in 1913 resulted in the entrance of about thirty-five independent manufacturers. Those who still remain without the association feel that the benefits to be gained are not worth the expense of membership, inasmuch as they receive the same terms from the union as do those manufacturers belonging to the association. It has also been said that a number of these independent manufacturers join the association when they have grievances to be considered and withdraw when their grievances are passed upon and adjusted.

## The making of the agreement.

Unlike those national agreements which provide only the machinery for the settlement of disputes and which leave to the local unions the formulation of working rules and, in some cases,

<sup>14</sup> Minutes, Final Conference, Blowers' Report, p. 19.

wage rates, this agreement fixes in detail practically all of the conditions of employment of the glass bottle makers. The local unions can legislate only upon such matters as are concerned with the internal government of the union. When, however, some unforeseen question arises during the year, an attempt is first made to settle the matter in conference between the factory committee<sup>15</sup> and the employer, and if they are unable to arrive at an agreement, the question is referred to the president of the union.

All questions relating to prices and rules, which are not settled to the satisfaction of both parties during the year, and those matters, already in the agreement, which one or the other parties wishes to have amended, are considered at the May preliminary conference. The questions not settled at this conference and those arising between the preliminary and final conferences receive consideration at the latter conference. The matters upon which adjudication is desired are usually submitted to the conferences in the form of resolutions from local unions or of requests from individual manufacturers; but all of such resolutions and requests must conform to the modus operandi described earlier in this paper.

The members of the executive board of the Glass Bottle Blowers' Association act as the representatives of the union at the conference. These members are elected annually at the convention of their organization and hold office, therefore, only for one year. Although the acts of the representatives of the union thus frequently become the subject of review by their constituents, the union conferees have throughout the conference debates shown unusual independence of judgment. That, however, their conduct has reflected the mature opinions of the majority of the union is attested by the fact that many of the members of the executive board have been reëlected over a number of years. Indeed, the president of the association, an ex officio member of the board, has now held that position for almost twenty years.

The representatives of the union have full power to settle questions without referring the matter back to their organization. Nor do they go to the conferences instructed to take one stand

<sup>&</sup>lt;sup>15</sup> The factory committee is a committee of workmen in a shop chosen by the employees in that shop to represent them in conferences with the employer.

or another. Attempts have, to be sure, been made from time to time to instruct the representatives to follow out a certain line of action or to strip them of the authority to settle the more important questions arising at the conference. These attempts have, however, always been met by the concerted opposition of the officers and of the majority of the membership. Thus, early in the history of the agreements resolutions were introduced at a convention removing the power from the conferees to settle anything relating to price lists, apprentice laws, or market money. These resolutions were received with the following comment from the president of the union:

To adopt the amendment would simply deprive your officers of all executive power and make them mere figure-heads to represent the organization. Take away the power to concede or alter anything in the price list, apprentice law or market money and you leave nothing of any importance on which to treat with the manufacturers' wage committee. No committee of manufacturers would meet your committee unless it had full power to act and bind the association and if this convention takes this power from them, it would be more sensible to put your demands on paper and send them by post saying that such is the will of the conventions than to send your representatives there merely to state it. This convention does not represent all the glass trade, only the working portion of it. Your employers represent the other portion. They also have an association and appoint a committee to present their demands in conference. If they adopt the same principle as is embodied in this resolution or amendment giving their committee no power to act on the main questions, do you for a moment think a settlement would ever be effected? No man with any self respect could accept office under such restrictions.18

Again in 1906 the attempt was made to instruct the representatives of the union on a definite proposition. Here, too, the attempt was unsuccessful. In this case, the resolution providing that the "30th annual convention instruct our President and Executive Board to entertain no proposition for reduction in wages the coming season" was replaced by the resolution "that it is the sense of the convention that we do not deem it advisable to accept a reduction for the coming season." 17

The members of the executive board of the manufacturers' association are similarly the representatives of that organization at the annual wage conferences. Instead, however, of being

<sup>10</sup> Proceedings, United Green Glass Workers, 1894, p. 24.

<sup>11</sup> Proceedings Glass Bottle Blowers, 1906, p. 228.

elected annually by the convention they are appointed annually by the president of the organization. Like the union conferees, they are sent to the conferences uninstructed. But here, as in the case of the union, dissatisfaction with the work of their representatives has at times been expressed by manufacturers. These objections have arisen generally from two sources. In the first place, the manufacturers of hand-made ware have long protested that their representation upon the wage committee has been inadequate and that all legislation is framed to benefit the machine manufacturers at their expense. Accordingly, in 1912 a number of the hand manufacturers withdrew from the annual conferences on the ground that those conferences were "dominated by the machine manufacturers and we do not care to have the machine manufacturers adjust the wages for the hand blown."18 The other protest arises from those manufacturers who feel that their executive committee has not presented the case of the manufacturers as vigorously as it might, nor has it been insistent enough in pressing their demands. From these feelings grew out the request that the president appoint, in addition to the usual committee, two alternates to be selected "from the twenty or more members who have protested present conditions" with the power to attend the wage conference.19

At the preliminary conference of 1914 a number of manufacturers and members of the National Bottle Manufacturers' Association "asked permission to confer with the members of the committee representing the manufacturers and desired to be heard concerning matters in which they were interested." Their request was granted. When the meeting was called to order, it was announced

that the meeting would be of an informal nature and each person present was permitted to talk upon any matters that were coming before the Joint Wage Committee. . . Nearly all of the visiting members had more or less to say, and many things were explained in regard to the methods and manner of conducting the conferences. . . The visiting members stated, later, that they had learned many things concerning the Joint Conference which they did not know, and before retiring expressed themselves as being much better satisfied than when they came. 20

<sup>18</sup> Proceedings, Glass Bottle Blowers, 1912, p. 171.

<sup>19</sup> Proceedings, Annual Meeting of the National Bottle Manufacturers' Association, August, 1914.

<sup>\*</sup> Proceedings, Preliminary Wage Conference, Manufacturers' Report, 1914, p. 3.

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While these movements of protest have no doubt exerted some influence on the conduct of the conferees, neither in the case of the union nor in that of the manufacturers' association, have they effected any change in policy concerning the relation of the representatives to their respective organizations. All representatives attend the annual conferences as exponents of the sentiments of their constituents; rarely, however, do they attend bound by specific instructions.

No formal system of voting is provided for in the agreement, but it is the prevailing practice in the conferences for the manufacturers' representatives and for those of the union to vote as units. A mere majority of the members present, therefore, is not sufficient to carry a measure. The measure must be agreeable to a majority of the representatives of each party before it can become a part of the agreement.

On several occasions the conferences have resulted in deadlocks. Under such conditions it has been the custom for the conference to adjourn and for the majority of the establishments to resume operation under rules and prices of the preceding year in the hope that the following year would find the union or the manufacturers less obdurate. The climax of a series of demands by the manufacturers for substantial reductions in piece rates came in 1906 when the representatives of the employers persisted in demanding reductions which the union refused to grant. During the debate on the proposition, Mr. Ralston, president of the manufacturers' association, suggested that "the matter be submitted for arbitration to a judge of the courts."21 The suggestion was not acted upon. Indeed, the consensus of opinion in the trade seems to be opposed to the submission of major issues to arbitration. Both employers and employees prefer to thresh out the matters in conference and, when it is found to be impossible to reach an agreement, to work in a state of armed truce for one or more years under the rules of previous years.

When it was stated above that in the event of a deadlock the manufacturers would open their plants under the rules and prices in operation during the preceding year, it should have been noted that these resumptions of work frequently took place some time after the annual conference had adjourned. During this period between the adjournment of the conference and the acceptance

n Proceedings, Glass Bottle Blowers, 1906, p. 59.

by the manufacturers of the union's ultimatum, the agreement may be said to have been suspended. For example, at the conferences in 1905, the manufacturers demanded a general reduction in piece rates of 331/3 per cent. This reduction the union would not concede. The manufacturers, therefore, moved to adjourn without setting a date for a further conference. On September 1, 1905, the president of the Glass Bottle Blowers' Association issued a circular letter containing the following statement:

Up to the present we have heard nothing from the manufacturers' association. Those among their members who insisted on a reduction and favored adjourning the conference until the same was secured will doubtless remain idle as long as they possibly can. While others in that association, coupled with the independent manufacturers, will begin starting their factories early this month.22

From this statement it is seen that for several months, at least, after the adjournment of the final conference, the industry was virtually in a state of lockout, or, more accurately, the agreement was temporarily suspended. The same situation arose in 1909. Again the manufacturers' demand for a substantial reduction had been refused by the union. Accordingly the conference of July 26, 1909, disbanded; and the manufacturers did not open their plants. Early in September, however, the American Bottle Company agreed to accept the concessions of the union. Moved by this break in its ranks, the manufacturers' association sought another conference at which an agreement was finally reached.23

In both instances, and in fact in all other similar cases during the life of the agreement, the strength of the union, in that it is virtually impossible to run non-union shops in the glass bottle industry, forced the employers to resume operation under conditions not entirely satisfactory to them.

<sup>&</sup>quot;They could open their factories and employ members of the union under the previous season's list and rules; for on August 8, 1905, President Hayes had issued the following circular letter to the trade: "Manufacturers who desire can engage our members to work by agreeing to pay last season's wages, and if any of them are doubtful about our ability to hold out and want assurance that they will be given the benefit of any settlement that may hereafter be made different from that which we demanded (last year's list and rules), branches are authorized to say to such employers that they will be given the advantage of any settlement that may be made later on and from the date upon which they started to work."

<sup>22</sup> Proceedings, Glass Bottle Blowers, 1910, p. 11.

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Technically, of course, this delay in opening a plant might be described as a lockout. It has, however, not been so regarded by the parties to the agreement. Even though conferences were adjourned without reaching any agreement and the manufacturers were forced, probably because of the superior strength of the blowers' organization, to employ the men at terms unsatisfactory to themselves, yet in the following year they showed confidence in the efficacy of a system of collective bargaining by again entering the conferences with their employees.

### The settlement of disputes arising under the agreement.

In an agreement which specifies, in such detail as does the present one, practically all of the conditions of employment, the matters which arise during the year are as a rule purely interpretations of the agreement. For example, a new bottle is introduced in one of the factories and a dispute ensues as to the price to be paid for blowing the bottle; since the agreement states that the bottle shall "be rated at the same price and subject to the same rules in regard to weight, as those specified in the bracket which they resemble in size, shape, weight and finish,"24 but little room is left for any great differences of opinion. The same might be said of any question that might conceivably arise under the agreement. So inclusive are the annual agreements and so definite are their terms, that probably the majority of disputes arising in various localities are settled by merely turning to a particular rule in the agreement and applying it to the case in point. On the other hand, disputes have been observed under the agreement where there was no question of the interpretation of rules, but where one or the other of the parties deliberately violated or disregarded the agreement.

The first step in the adjustment of disputes under the agreement consists in referring the matter to a conference of the employer and a factory committee. Most disputes are settled in that conference. When, however, the conferees are unable to agree, the question is referred for settlement either to the president of the union or to one of the executive board of that organization whom the president designates as his representative. The president's decisions are final unless reversed at the following

<sup>&</sup>quot;Wage Scale and Working Rules, Blast 1914-1915, sec. 34.

joint conference. Although the president of the union has been acting as arbitrator since 1902, his decisions have been but rarely reversed. The great majority of his adjudications are concerned with the determination of prices on new ware, samples of which are sent to the central office of the union for his inspection. In those cases where he has decided upon a certain price and that price is found by the joint conference to have been too high, the manufacturer is reimbursed for the excess wage payments; conversely, a decision in favor of the employer, which might be reversed by the joint conference, forces the employer to make up the difference in wages. Instituted originally at the suggestion of the employers,25 the system of delegating to the president of the union the power of interpreting rules and of settling disputes has, during its existence of twelve years or more, worked admirably. With hardly an exception the decisions made by the president during his incumbency have met with general approval; and no record is as yet to be found of any suggestions, from either workman or manufacturer, which would so modify that section of the agreement as to remove from the president of the Glass Bottle Blowers' Association his present powers.

The history of the operation of the agreement has been notably free from strikes and lockouts. The great centralization of power in the hands of the national organization and the apparent general opinion among the members of the union that such centralization is wise, has resulted in a universal support by the subordinate unions of the mandates of their national officers and of the decisions of the joint conferences. When, for example, a general reduction in piece rates was adopted by the conference, several local unions in San Francisco expressed their dissatisfaction with the agreement and struck. This violation of the agreement was met with prompt action by the national officers who ordered the strikers back to work. The strikers first denied that they had stopped work, but after a few days, when the charge was proved, they returned to work under the prices and rules against which they had revolted.26 The action of the national officers was upheld later by the national convention of the union.

<sup>&</sup>quot;Minutes, Preliminary Conference, Blowers' Report, May, 1902, p. 21.

<sup>\*</sup> Proceedings, Glass Bottle Blowers, 1910, p. 153.

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Similarly, among the manufacturers, the attempts to violate the agreement by locking out the employees or by running shops under rules contrary to those adopted by the conferences have been few and far between. In this case, however, compulsion upon the manufacturers has not come from the manufacturers' association. This organization, unlike the Glass Bottle Blowers' Association, has little control over its members and can, therefore, do little in forcing its members to observe the terms of the joint agreements. The following debate at the conference of 1905 indicates the position of the manufacturers' association in enforcing upon its members the decisions of the joint conference:

Mr. Hayes stated that it was a sort of rule among his predecessors at these conferences to ask the manufacturers whether they would abide by the decisions of the conference, but such a course has not been his policy, because he always assumed that the agreement would be lived up to by all of the manufacturers represented by the committee, but during the past year some had violated the agreement and some had intimated that the Executive Committee has been accused of extending special favors to some manufacturers while refusing them to others. . . . The chairman (a manufacturer while refusing them the agreement is signed it becomes a moral obligation of all manufacturers employing union labor to live up to them, but that there was nothing in the hands of the committee or the individual members thereof to enforce them. Any manufacturer could refuse to obey them, the power to enforce being wholly in the hands of the blowers.<sup>27</sup>

Although the power to compel obedience to the agreement and to the decisions of the president of the blowers' association in his settlement of disputes resides in neither the employers' association nor the union, yet the desire of the manufacturers generally to avoid any action that might lead to a discontinuance of the annual conference and the strength of the union, which enables it to bring recalcitrant employers into line by threatening to withdraw their working force, are the two factors which operate to prevent more frequent and more serious breaches of the agreement.

It will have been observed in the foregoing discussion that the few suspensions of the agreement have arisen not from dissatisfaction with the adjudications of minor issues under the agreement, but have in reality constituted revolts against the settlement of the major issues embodied in the agreement. For instance, at the preliminary conference of 1909, Mr. Hayes reported that some of the manufacturers had refused to be bound by the agree-

<sup>&</sup>quot;Minutes, Final Conference, Manufacturers' Report, 1905, p. 4.

ment and had operated their factories during the so-called "summer stop" agreed upon by the last conference.28

Here, obviously, there was no question of the interpretation or application of a rule of the agreement, but a deliberate disregard of a rule whose meaning and intent was plain. This situation which is in a way a typical one suggests the following general proposition concerning the operation of the agreement: Where the national agreement lays down in detail working rules and piece rates, leaving to local adjustment matters of purely secondary importance, the disputes arising between conferences are likely to be, as they are in this particular instance, protests not against interpretation of the agreement, though there are undoubtedly some disputes of such a character, but against attempts to enforce the plain letter of the agreement. The remote design behind such protests is, of course, the desire to stir up a sentiment against the objectionable practice or rule and to have that rule amended or rejected at the following conference.

The practical absence of any widespread violation of the agreement can be attributed primarily to two factors: (a) the character of the persons in the industry and (b) the national character of the agreement.

a. The members of the Glass Bottle Blowers' Association have always been and are today highly skilled workmen, whose earnings were for many years far above those of skilled workmen in other industries. The high wages earned and the skill required to perform the work have apparently combined to form workmen of conservative instincts and of mature judgment. The character of the workmen has again and again been evidenced in the selection of officers of a high type and in the general support by the membership of such legislation, as the voluntary reduction of piece rates, which would in other industries have engendered the deepest hostility among the rank and file of the organization. In addition, problems following the introduction of machinery of the gravest import to all members have been met, if not always with perfect assurance and without petty squabbles, at least in an open-minded and intelligent fashion.

b. The national character of the agreement, which lodges in the national officers of the union the responsibility for the content of the agreement and for its enforcement, imposes upon these

<sup>26</sup> Minutes, Preliminary Conference, Manufacturers' Report, 1909, p. 8.

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officials a personal interest in the successful working of the agreement which makes for a more diligent and more stringent enforcement of its terms.

From the standpoint of the machinery of the agreement, also, that clause which designates the president of the blowers' association as the arbiter of inter-conference disputes, probably inspires in the members of the union a respect for the agreement and a belief in its fairness which might otherwise not have existed. The adherence of the employers to the agreement is perhaps even easier to explain. In the first place, this system of collective bargaining, by maintaining uniform wage scales and working rules throughout the whole of the industry has eliminated the objectionable inequalities, as between different employers, that are an inevitable accompaniment of a decentralized system of collective bargaining. Second, the history of the agreement has been such as to modify to a considerable degree the attitude of the employers toward their workmen. For on three different occasions the union, after much pressure to be sure, has agreed to substantial reductions in wage rates.

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# BASES OF VALUATION IN THE CONTROL OF RETURN ON PUBLIC UTILITY INVESTMENTS

The question as to what constitutes fair value in rate regulation or, more specifically, in the control of return on public utility investments has been extensively discussed in recent years; and while doubtless progress has been made in clearing up the matter, we are still in confusion. One difficulty has been a lack of clear distinction between the different bases of valuation that might be or have been used. Especially has this been true of the discussion relating to "actual cost" as opposed to "reproduction cost." As will appear, there are several "actual cost" concepts, and writers commonly pass from one to the other without consciousness of the fact. Elements of one concept are frequently transferred to another to which they do not consistently belong. This applies particularly to depreciation, going value, and the various so-called intangible costs. It seems worth while, therefore, to attempt a clear separation of ideas, and briefly to test each as to its usefulness in the determination of fair value.

The question is raised here whether the time has not come for making a definite selection, through legislative action, of a clear single basis of valuation to be applied to all cases involving the control of return on public utility investments. The basis adopted should, of course, be chosen upon the broad grounds of social expediency. What we wish is effective regulation for the general welfare. The test for our selection, therefore, should not be the commercial one of market value, but the social-ethical one of justice or reasonableness. But what is reasonable? That is what needs to be clearly defined. The decision must finally rest upon our sense of propriety and our view of the common good.

More specifically, it seems that the basis selected should be judged principally by the following five standards: (1) It should be definite and clear, so that it can be easily understood; (2) it should be simple, so that it can be readily applied; (3) it should not break violently with present legal standards, although these are unsettled and the rule itself is to be adopted to clear up present uncertainty; (4) it should have regard for what the investors reasonably expected when they put their capital into the business; (5) it should not sacrifice the general welfare through narrow regard for individual justice or claims.

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if we are to get anywhere with regulation we must reach a definite decision. We should consider the various factors reasonably, and then select a single rule and apply it to all cases. If we attempt to determine the valuation in each case according to the particular circumstances, having fine regard for individual claims, we shall render regulation impracticable and defeat the broader claims of justice. The commissions would be overwhelmed with the details of individual cases, as they now are, and regulation would never be anything but a spasmodic and indefinite procedure. The terms governing the use of private capital in the public service should be clearly defined, so that investors as well as the public may know where they stand.

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The different bases of valuation that come within the limits of our discussion fall into two general classes: (1) investors' sacrifice concepts and (2) property appraisal concepts. The standpoint of the first is that of investors in utilities; and of the second, that of physical property used in service. This distinction is fundamental, though it is usually overlooked in valuation discussions. The first concepts are based upon historical facts, while the second are concerned only with existing plant and property used in the business. In carrying out this distinction we may make the following classification:<sup>2</sup>

¹To the writer it seems that, while regulation by the method of public rate making has been and is bound to be unsatisfactory, the control of return on investments should not be given up, but that it should rather be made definite and fixed. The following procedure is suggested: (1) a clear valuation policy adopted through legislative action; (2) a valuation made of all existing investments; (3) the result in any case taken upon the books of the company, and then a definite rate of return allowed on the amount and no more; (4) on new investments, the return based on actual investment at the rate involved in the issue of securities; (5) service rates freely enough fixed, with the coöperation of the commission, so that the stipulated return may be reasonably obtained; (6) any excess profits above the fixed return to investors, to go to the city, state, or federal government, in the form of a special franchise payment. See articles by the writer, Political Science Quarterly, vol. XXX, pp. 106 ff.; vol. XXX, pp. 254 ff.; vol. XXXI, pp. 260 ff.; also Electric Railway Journal, March 11, 1916.

<sup>2</sup> From an accounting analogy, the appraisal concepts correspond to the asset side of the balance sheet, and the investors' sacrifice to the liability side. The assets represent concrete physical things, while the items on the liability side indicate source of, or rights over, the assets; the first indicate things, and the second, the investors' relation to the things.

## Investors' sacrifice:

1. Cash or equivalent put into the business through the issue of securities. This is the primary sacrifice.

2. The same as 1, plus the amount of earnings reinvested. This may be called the direct sacrifice.

3. The same as 2, with additions or subtractions on account of past excess or deficiency in return to investors. The best measure, as shown later, is the primary sacrifice plus accumulated deficiency in return or minus accumulated excess. This is the net total sacrifice.

## Appraisal concepts:

1. The existing property in service at present prices of materials and labor—gross reproduction cost.

2. The same as 1, with deduction for depreciation, taking account of the physical state of the property—net reproduction cost.

3. The existing property appraised at prices paid at the time of installation of the different units. This is usually termed actual cost, but may be more distinctively called gross installation cost.

4. The same as 3, with deduction for depreciation, termed net installation cost.

The above are the different concepts that have received more or less consideration in valuation discussions, and they should be clearly defined and compared as to their serviceability for valuation purposes. There are several other ideas which have some importance and may be briefly reviewed. Among the investors' sacrifice concepts are the par value of securities outstanding and the market value of the same, while among the property concepts are the book value of the assets, and appraisal of the property as a going concern. None of these deserves serious consideration. The par value of the securities outstanding and the book value of the property would often be practically equivalent amounts and obviously would not furnish a reasonable basis of valuation. In many cases they would give absurdly large results, because of securities issued and charged to property account without any actual investment. The market value of securities and the appraisal of the property as a going concern would usually result in about the same amount; these bases could not be used because they would involve the profitableness

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of the enterprise and would result in capitalizing permanently against the public all existing high rates. In a business where monopoly is permitted, the capitalization of monopoly prices for the investors as against the public can not well be allowed.

Another appraisal concept, which has been given considerable attention by engineering writers, is the cost of reproduction, gross and net, not of the existing property in a case but of a plant economically the most efficient to provide the required service. The idea involved is that a community is entitled to the most economical service available, and should pay the cost of such service. This sounds reasonable, but in practice does not prove to be a workable idea. The factors in such a valuation would be all hypothetical; the inventory of the existing property could not be used; and it would be difficult to determine what would be the economical plant. Moreover, if the valuation were high because of the assumed efficiency, the return would be high without the public's actually receiving the ideal service. It is the actual plant with which we have to deal and not a hypothetical one. If any parts are obsolete or unsuited to their purpose, allowance can be made in the appraisal.

#### II

We shall now take up the investors' sacrifice concepts, defining them in more detail and considering their suitableness for rate regulation and the control of return on investment. It may be stated here that while for practical reasons an appraisal method will have to be adopted, nevertheless, among the principal tests of reasonableness is bound to be the idea of sacrifice on the part of the investors. After all, we can not get away from the idea of sacrifice as the basis on which the public should pay for service. This fact will come out more clearly in the appraisal discussion. But while the sacrifice concepts can not well be employed in direct valuation, they must be considered in the selection of the best appraisal idea.

Primary sacrifice. This is the amount of cash or its equivalent put into the business through the issue of securities. It is a simple standard that requires no special examination. As an idea, however, it is frequently confused with appraisal at actual cost, though they are distinct. In a sense this is the actual cost of the business, and has considerable merit as a valuation standard. It is simple and in most cases could be easily applied. Usually

the facts could be readily ascertained and a proper determination made. The cash issues would furnish little difficulty; but the evaluation of securities issued for promotion or for services and construction would have to be somewhat arbitrarily fixed. Altogether, however, the valuation could be made with less difficulty and expense and with nearer approach to accuracy than by any other method.

The fundamental objection to the method is that it would have no regard for reinvestment of earnings. It would consider only the primary sacrifice, whereas the bulk of the property may have been built up out of secondary or indirect sacrifices. The result, therefore, would be that individual concerns with essentially the same history would be assigned greatly different amounts as the basis of future return. Assume two companies which have had closely parallel records of construction, development of business, and profits from operation; and that the one has regularly left a large share of the profits in the business, while the other has paid them all out as dividends. In the first case, therefore, a large proportion of the extensions and improvements have been made out of surplus, while in the second the funds have all been provided through the issue of securities. Or in the first, no formal profits were reinvested, but many proper construction charges were made to operating expenses; thus again improvements were financed out of current funds and really a hidden surplus was created, while in the second case, new security issues were made.

It would seem unreasonable to grant the second company the larger valuation merely because of the greater par value of capital obligations outstanding. The real sacrifices in the two cases were essentially the same: in the one case profits were left in the business when they might have been taken out; they represent investors' sacrifice no less than if funds had been paid out as dividends and had then been returned through the issue of new securities. To grant the second company a larger valuation for future return would be to take appearance for substance. This would be a departure from present legal standards, indefinite though they are, and would scarcely conform to our sense of reason and justice. Undoubtedly, when past profits were left in the business, the investors fairly believed that they would be permitted to obtain a future return upon them.

Direct sacrifice. This basis consists of the cash or equivalent

put into the business through the issue of securities, plus reinvested earnings. It provides the adjustment for the lack of which the primary sacrifice method should be rejected. The title, direct sacrifice, may be somewhat misleading, for the concept includes not only what might be called the direct sacrifice through the issue of stocks and bonds but also the indirect sacrifice involved in the putting of profits back into the business. But even the latter process may well be considered as a direct investment, so that for the purpose of clear distinction we may pardonably include both the issue of securities and the reinvestment of earnings under the title suggested.

This standard would probably correspond more nearly to our sense of justice and would meet more directly the reasonable expectations of investors, than would any other method that might be selected. If there had been proper accounting throughout, the investment would be shown by the funded and other long-term debt, the capital stock, and surplus accounts, with adjustments for premiums or discounts on the securities, and would be clearly stated in the balance sheet of the company. It would correspond to the idea of capital as used in the accounting sense. It would not only represent the sacrifice made by investors but would be equal to the cost to the company of all the property in service and carried in the accounts. Moreover, it would be substantially the same basis that would best be employed in the control of future investments.

In so far as any clear obligations have been established on the part of the public to the investors, it would seem that when the latter turned their capital over to the public service, all they could reasonably have expected was a fair return on the amount then provided, and subsequently a fair return also on reinvested profits. The public, on the other hand, should have expected to pay such returns, or it would not have had the capital placed at its service. May we not, therefore, fairly assume, for the sake of establishing definite regulation, that there was such a tacit agreement between the public and investors, and that the investors' present equities may be determined on the ground of that understanding?

The difficulty with this method is the practical one of application. If the accounts had been properly kept, the task of valua-

<sup>&</sup>lt;sup>8</sup> It would be equal to the sum of the plant and other asset accounts less the depreciation reserve and all strictly current liabilities and operating reserves.

tion would be very simple, for the amount could be taken directly from the books of the companies. But not much reliance can be placed upon book records. As is generally known, securities originally issued may have represented very little actual investment, although in the mass of cases a reasonable adjustment could probably be made. The greater difficulty appears in the inadequate or unreliable operating accounts during the life of the company. It has been a common practice, after the initial liberal issue of securities, to charge all possible construction and improvements to operating expenses; thus real investment would be made without being shown in the accounts. On the other hand, it has probably been no less common to charge proper operating expenses to construction, so that profits would be overstated, income really taken out of capital, and the investment not maintained. And often the same company charged proper construction costs to operating expenses and included many operating items in the construction account.

If, therefore, we were to adopt the method of direct sacrifice as the valuation standard, we should be compelled to reconstruct the accounts of each company for its entire history. This would be an exceedingly difficult thing to do even under the most favorable circumstances. Frequently, past records, especially those antedating commission control, would be so incomplete that reconstruction would amount to invention. It would seem, therefore, that while direct sacrifice appears to be a just standard of valuation, practically it is unworkable.

Net total sacrifice. This would provide adjustment of the direct sacrifice on account of past deficiency or excess of fair earnings. It is based on the idea that from the first the investors had an absolute right to a fair return on their sacrifice and no more. Any deficiency in past return should therefore be added to the valuation while any excess should be subtracted. The analysis would cover the entire history of the company, and the final result to date would give the net total sacrifice of the investors. Compound interest allowance equal to the assumed fair rate of return would be included in the valuation.

The calculation may be made in two ways: (1) it may consider the annual net earnings as the return obtained by the investors;<sup>4</sup> or (2) it may treat the interest and dividends actually paid

<sup>&</sup>lt;sup>4</sup>This would be equal to the sum of the operating revenues less all operating expenses and taxes,

as the return. According to the first view, the calculation would depend on the completeness of the current operating accounts. It would proceed as follows: The first year's investment through the issue of securities, plus the year's reinvested earnings, plus deficiency of total net earnings compared with a reasonable return (or minus excess earnings), would equal the net total investment at the beginning of the second year. This amount, plus the second year's reinvested earnings, plus the deficiency or less the excess, would give the valuation for the beginning of the third year. Any new investments through the issue of securities would have to be added to the amount. In this way the calculation would have to be carried through every year of the company's history to the time of the valuation. The result would be the net total sacrifice, on which the future return would be based.

The difficulty with this method of calculation is that it would depend on the completeness of past operating records. If they were incomplete, as they frequently are, the valuation would become correspondingly hypothetical. For this reason the second method is better, treating the cash actually paid to investors as the return realized. This, after all, is the actual income obtained from the investment. The amounts in question could usually be readily determined even if the past operating accounts were incomplete. Moreover, the calculation would be simpler, and would proceed as follows: The first year's investment through the issue of securities, plus the deficiency in return (interest and dividends paid as compared with the assumed fair return) or less the excess, would equal the investment at the beginning of the second year. This amount, plus the deficiency or minus the excess, and plus new investment, would be the amount at the beginning of the third year. In the same way the calculation would be brought down through the history of the company to the date of the valuation. The total net sacrifice shown would be the same as by the first method.

In a sense, the net total sacrifice appears to be an ideal method of valuation. It proceeds vigorously with the idea that the investors have been entitled to a fair return and no more. Any excess return is considered as a withdrawal of capital, and any deficiency as an addition. The final amount is the total sacrifice incurred, for which the public should be responsible.

Doubtless if this idea had been clearly established in the past we should be saved the present confusion in regulation. It might well be applied to the future if the existing tangle can once be straightened out. But as to the past, covering all present investment, while we have undoubtedly had the right to limit the return strictly to the total sacrifice, we have never clearly asserted the right, and in the absence of an established policy we can not very well assume that it has been in force all along and should now be rigorously exercised. The law has been loose. The distinction between private and quasi-public enterprises has not been very clear. Even for future investments the standard of total net sacrifice could be established only by sweeping legislation. Past court decisions can scarcely be interpreted as placing such a limitation on existing properties.

The first general criticism of the method, therefore, is that it would break too violently with present law and our present notions as to public utility enterprises. While the law and our ideas have been indefinite, nevertheless we should scarcely subscribe to the view that past profitableness at service rates permitted by the law could now be treated as diminishing present property rights. If the excess profits have been reinvested in the business, are they not according to our prevailing views just as much property rights as if investment had been made through the issue of securities? But if the excess has been paid out as dividends to stockholders, can we think of the amount as a reasonable deduction from the primary investment through the issue of securities? Does the total net sacrifice view correspond with our notions of justice?

In the same way, we may ask whether the addition to investment on account of past losses or deficiency in return corresponds to our notion of property rights. The courts have said consistently that it is the value of the property upon which the return should be based. Of course, what is meant by value is not clear. But can it be that losses and lack of return would be viewed as such? To this, it is true, the answer does not seem to be as certain as to the question of deduction from investment on account of excessive returns. The New York law clearly allows past deficiency to be added to the valuation; the same appears to be true in Wisconsin; a number of commissions and courts in other states have used expressions that might be interpreted to follow the New York rule. The addition would be treated as "going value." But this procedure is by no means generally

recognized throughout the country. The New York decision came as a surprise, and the Wisconsin position has been severely criticised. In so far as the addition is accepted in law, it is a recent development applied retroactively to past conditions. It is chiefly court-made law and seems to be based on a lack of comprehensive understanding of the problems involved.

It should be pointed out that while the New York law proposes to add to the investment on account of past losses and deficiency in return, it does not deduct excessive profits. Unless the adjustment for past return be made consistently either way, does it seem reasonable that it should be applied only so as to favor and never to penalize investors?<sup>5</sup>

Does not the question of justice really hinge on the point whether the investors, as the law has stood, could reasonably have expected operating losses to be added to their capital? Certainly they did not suppose that profits would be deducted. Should they not have expected that additions and subtractions would follow the same principle? If no deductions, why any additions?

But since the law has been unclear, and it should be made clear, we must be guided by what seems reasonable under the confused circumstances. If past earnings are to be considered in the valuation, should they not be treated consistently whether they result in subtraction from or addition to the primary valuation? If so, then we face the question whether the rule is reasonably workable at all. As a matter of fact, would it be practicable to subtract from the investment all excessive profits? In the average case there would be no difficulty, for presumably only fair returns have been obtained. But many companies which have huge profits have paid them out as dividends. Consequently they would have their investment greatly diminished or wiped out altogether. In not a few cases there would be even a liability in favor of the public. Practically, could we realize on the liability? Could we even seriously cut into the valuation when

<sup>&</sup>lt;sup>6</sup> See the writer's article, "Going Value in the Appraisal of Public Properties," Political Science Quarterly, vol. XXX, pp. 463 ff.

The basic valuation in New York is a physical appraisal presumably at reproduction cost less depreciation; if the result is less than the total net sacrifice to the investors, the difference is added as going value; if it is equal or greater, it is permitted to stand undiminished whatever the past profits, but no special going value above the appraisal is allowed.

such deductions had not been expected? We should be confiscating many interests, and are we prepared to face the probable resulting confusion?

If we can not practically treat excessive profits as withdrawal of capital, we come back to the question, Does it seem reasonable to consider the deficiencies as additions? Our sense of reasonableness must control; the matter can not be determined by mathematical formula. We should remember, however, that in many cases we could not make up completely for past losses, unless we were to meet them through direct payments from the public treasury. Many companies have been unprofitable simply because of their poorly located properties. This condition would not be changed by the method of valuation. In such cases, even if the losses were added to capital, the amount would be merely a book figure, for the rates could not be made high enough to bring a return on the total net sacrifice involved. There have been many ill-judged ventures which have always been operated at a loss and can never be made reasonably profitable. If we attempt to underwrite the loss, we can not do it through high service rates; and are we willing to use direct public funds for the purpose? If not, then the addition to the valuation would meet only moderate past losses; the serious ones would still rest upon the investors.

We must remember also that there has been very little real regulation in the past. For the most part, companies have been free to charge such rates as could be fixed under the particular circumstances. There has been practically no regard for the cost of service. The principle of rate making has been what the traffic would bear, and companies have made all the profit they could. If now we wish really to regulate and to adopt a rule of valuation for the purpose, and if we can not very well subtract all past excessive returns from the primary valuation, then why add losses or deficiencies in return? Why not draw a curtain on all past returns, except as in a general way they may affect our judgment of the proper standard to be selected? So far as individual cases are concerned, what investors made or lost we can not now very well change.

#### III

We now come to the appraisal concepts. As already explained, here we disregard investors' sacrifice and look simply

upon the concrete physical property that is employed in the public service. An inventory is made of all property and then each item is valued according to the particular standard employed.

Gross reproduction cost. This represents an appraisal made at present prices of materials and labor. The result is the so-called tangible property. Then various additions are made for intangible items—costs that would be incurred if the property were to be built new. The usual items are: organization expenses; taxes, interest, and injuries during construction; and legal and

engineering expenses connected with construction.

Gross reproduction cost is the standard of valuation which corporations are demanding. It is supported by many engineers and by some accountants and economists. Under present high prices it would probably give corporations the largest valuation that could be obtained through any single basis. This is especially true if certain elements are allowed which need not necessarily form a part of the method. Thus, companies claim a return upon the reproduction cost of property installed by the public; upon land and other grants made by the public for the sake of obtaining the service; for going value covering past deficiency in return; and for property retired in the past because of changes in the business.

None of these special items strictly belongs to the reproduction method of valuation; least of all, going value, whether viewed as the accumulated deficiency in return or as special value due to a property which has an established and connected business. Nor can physical property retired in the past logically be included in a present inventory. If these items were counted, it would be on the ground of past sacrifice and not appraisal of present property. Public investments need not be treated as private property. Land given to a company should properly be excluded from the inventory, as should all public construction, such as paving of streets, grading, etc. In case of money grants, the amount might be deducted from the completed appraisal. But all these items are claimed by companies to be included in the reproduction valuation.

The general objection against gross reproduction cost is that an amount would be included which the investors could not reasonably have expected. Because of present high prices, reproduction cost would be much greater than the direct sacrifice incurred 580

by investors; this is especially true of the older properties. The question is, Upon what amount did the investors expect to get a return? What was the implied contract between them and the public? Can there really be much doubt in the matter? Of course, here we come back to investors' sacrifice; not, however, for the purpose of determining elements for a physical appraisal, but of getting a broad view of justice. Whatever basis be selected, its expediency is bound to rest largely on the reasonable expectation of investors. We must consider the inducement or the implied consideration that led them to put capital into public enterprises.

For street railways, electric light and power companies, and gas companies, the gross reproduction cost would probably not be much greater than the cost of the existing property as it was installed. But in the case of steam railroads and perhaps interurban electric railways the question whether to apply to the inventory present or installation prices assumes tremendous importance. It is common knowledge that through the country as a whole very little was paid by the companies for right of way. The land was either received outright as a gift or was acquired at farm land prices. But now, with land values greatly advanced, the addition to the original cost would amount to tremendous sums. The question then is, When the investors put their money into the business, in so far as they realized the public nature of the enterprise, did they reasonably expect to be permitted a return on the increased values? Does it not seem more reasonable to assume that they expected a return upon their actual investment or sacrifice? Their money was sunk into property which was definitely devoted to a single purpose. Its use could not be affected whatever change in land values might come about. It could not be sold for other purposes, so that the advances could not be realized through sale. Suppose prices had fallen: would the investors have been likely to admit as just a return restricted to the reduced valuation? May we reasonably assume that the prospect of return allowed on the future values of land given to the companies was really one of the inducements that led investors to put capital into the business? If so, then of course it would be only just to permit a return now on the increased values. But it seems more likely that it was this: Land or money grants did make a fair return on investors' sacrifice more probable, but the inducement that

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really led to the investment was return on the actual sacrifice. From this standpoint, we may look upon the land or money grants as public investments on which the returns were to be taken in terms of general social development. There is no clear reason why they should be viewed as outright gifts to private individuals.

A second criticism against gross reproduction cost is that no allowance would be made for the physical state of the property. The inventory should include only property in service, but just when and why a unit of plant or equipment should be retired is often difficult to determine. If no allowance were made for physical condition, quantities of practically worthless objects could be incorporated in the inventory and the valuation could be greatly padded against the public. Further, no distinction would be made between well-maintained and run-down property, or between efficient up-to-date plant and that which is obsolete or inadequate for its purpose.

Net reproduction cost. The points in the preceding paragraph bring us to the second appraisal concept, gross reproduction cost less the accrued depreciation of the existing properties, or net reproduction cost. Accrued depreciation would include deductions not only on account of natural wear and tear of the property but also for obsolescence and inadequacy.

Net reproduction cost has been used more extensively in rate cases than any other method and has usually received the approval of the courts. It corresponds more nearly to value as understood in unregulated competitive business and would be substantially equivalent to the selling price of the total individual units of the property if a free general market were assumed. The method would be quite satisfactory were it not for the inclusion of enhanced land values, or of public grants and construction, and illogical allowance for going value and other intangibles.

If deduction for depreciation is made from cost new, then clearly it will not matter what items are included in the inventory. If there is junk in the primary appraisal, it will be taken out again through the depreciation allowance. The val-

<sup>&</sup>lt;sup>6</sup> One interpretation of value as used by the courts might be the amount that the individual units of the property sold separately would bring on a free competitive market. This would be not the value of the property as a going business, but as dismembered and sold in parts at fair market prices. No such valuation could be made practically, for there is no market through which prices for the various articles could be determined.

uation can not be padded. If in a street railway appraisal an old horse car is entered at \$5,000 the depreciation deduction may be \$4,500, thus leaving only \$500 as the net reproduction cost—such value as the car may have for service or as junk. This deduction constitutes primarily a safeguard against padded appraisals. Otherwise it would be exceedingly difficult to prevent the inclusion of property which is not capable of any appreciable service.

Gross installation cost. This represents an appraisal at prices actually paid when the units of the existing property were acquired. It is the actual cost that is usually referred to when compared with reproduction cost. The term actual cost is easily thought of as sacrifice; installation cost is used as a more precise designation.

This method would doubtless result in a lower valuation than would the method of gross reproduction cost; and it would automatically eliminate most of the items that represent public expenditures, especially paving and excavation. Land given to the company would be included in the inventory but would be appraised at zero prices. Money grants could not well be traced to individual property units, though they could be deducted from the gross valuation. The prices determining installation cost would probably be as available as those for reproduction cost. The facts would often be shown by the accounts, as for example, the prices paid for land, and to this extent all hypothetical elements would be eliminated from the appraisal. If the facts are not shown by the accounts, the market prices of the different units shown by the inventory could usually be determined as readily for the time of installation as for the time of the valuation. For the sake of practical procedure, average prices for a ten-year or fifteen-year period might well be used. The objection to gross installation cost is the same as that made to gross reproduction cost-no provision would be made for the physical state of the property.

Net installation cost. If from gross installation cost we make a deduction for accrued depreciation, we arrive at the fourth appraisal concept, net installation cost. To the writer, this appears to be the most desirable method of valuation and the one that may be justly applied to all classes of existing investment. From the public standpoint, if we wish really to control the return on investment, it would not capitalize per-

manently against the public the present high prices and would require a return only in proportion to the serviceableness of the existing property. And it would conform most closely to the basis of valuation that would be desirable for the future.

From the standpoint of the investors, net installation cost would furnish substantially the valuation on which a return was expected. If there had been proper accounting in the past, this method would give an amount equal to the sum of the property accounts shown by the books less the depreciation shown by the reserve. As stated earlier, ideally the most satisfactory standard would be the direct sacrifice of investors-money put into the business through the issue of securities plus reinvested earnings; but the accounts could not be trusted to give the correct results. However, with proper accounting throughout, the sum of the investors' accounts would be equal to the sum of the property less the depreciation reserve. The property accounts would show the installation cost of the property in service. This is an accounting ideal firmly established. The depreciation reserve would provide for the physical state of the property, including the full amounts charged to operating expenses because of wear and tear, obsolescence, and inadequacy of property. In the absence, therefore, of trustworthy accounts, appraisal at net installation cost gives the closest practical approximation to the direct sacrifice of the investors.7

To repeat, the method would not capitalize present high prices; still it would give a valuation on which the investors might reasonably have expected a return. The method involves allowance for actual organization expenses and other intangible items that are not chargeable to depreciation. If it proved impossible to determine these amounts from the records, reasonable percentage should be used. But the method does not include going value either in the sense of accumulated deficiency in return or

<sup>&#</sup>x27;In ideal accounting, the original installation cost would have been charged to the property accounts; subsequently the cost of all units installed would likewise have been charged to the property accounts; accruing depreciation would have been included among operating expenses and credited to a reserve; then, when any unit was retired, it would have been credited to the property accounts at original installation cost and charged to the depreciation reserve. The net valuation shown at any time would have been the sum of the property accounts less the total accrued depreciation as stated by the reserve. This amount, then, ideally would be equal to the net installation cost here considered, and this would be equal to the direct sacrifice of the investors.

as special consideration for a connected business. Deficiency in return is a part of the total net sacrifice method, and should not be coupled with an appraisal idea. When a valuation has been made, a connected business is assumed, and no special going value item therefore appears that can be included in the appraisal. Except for reasonable intangibles, the method assumes appraisal of only physical property in service. This, of course, would include provision for working capital.

#### IV

It seems worth while to consider somewhat further the matter of depreciation. As already pointed out, this comes up in connection with the appraisal and not the investors' sacrifice concepts. Although in discussion this distinction is often not clear, obviously, if we wish to determine the amount of money put into the business through the issue of securities, or this amount plus the reinvested earnings, or the total net sacrifice of investors, taking into account excess or deficiency of return, the sum that we find is not logically subject to depreciation. If, however, we make an appraisal, we may then make an allowance in the valuation because of the physical condition of the property. And yet the question whether or not depreciation should be deducted from the primary valuation in an appraisal may very well be decided on the ground of sacrifice. The deduction of depreciation is not necessarily made; whether it should be made depends upon the reasonableness. The chief point to be considered is the fair expectation of the investors. We may assume that they expected a fair return on their direct sacrifice and we may raise the question whether they obtained such return. If not, possibly a rough adjustment for the future might well be made by permitting a return on the gross amount of the appraisal.

We face here a question of fact which is in need of extensive public investigation. At present we can only guess at what the facts have been. We know that fortunes have been made through public utility operations and that there have been also many losses. What has been the prevailing rate of return?

<sup>&</sup>quot;In this discussion of depreciation, the writer has in mind installation cost, but the views expressed may be applied also to reproduction cost. If the latter were to be adopted, the higher prices used might well be considered as a rough general offset against any past general deficiency in return, so that depreciation might well be deducted without further question.

If investigation should show that returns to investors have been fairly reasonable, common sense would dictate that depreciation should be deducted from cost new. And the benefit of a doubt should be cast in favor of deduction because of two facts: first, the companies have for the most part been free in the past to make all the profits that they could; and, second, if the deduction is not made it will be difficult to prevent padding of the appraisal. These facts might possibly justify deduction even if the rate of return should prove to have been lower than what the investors might reasonably have expected. The question is one of public policy.

In any event, however, a decision should be reached. If depreciation deductions are to be made, the practice should be made fixed; it should not be varied according to the experience of the individual company, as to whether it had obtained a reasonable return or whether it had definitely provided for depreciation in operating expenses. We may concede that the policy adopted should be based on the facts concerning past returns, but if we wish to establish a definite method of regulation, we must adopt simple rules which may be applied in the same way to all cases. If, in making a valuation, the special circumstances of each case were considered, dispute over facts would result because of untrustworthy and incomplete records; the machinery of regulation would become clogged, and the purpose of regulation would be largely defeated. Practical administration demands clear, simple, and uniform rules.

Suppose we were to make deductions for depreciation only when it seemed justified by past profits. We should immediately be faced with the logical difficulty that the deduction would be a question of investors' sacrifice and not of physical appraisal of property. When considering very profitable enterprises, where should we stop with the deduction? Should we subtract from the primary valuation all past excessive profits? Or should we follow a physical rule and in any case make a deduction only to the extent that the past profits permitted? It should be clear that depreciation is a function of the physical state of the property and not of past profits. A combination of the two is bound to lead to absurd individual results.

In the case of past unprofitable concerns, we might make no deductions for depreciation and so make good past losses. But

if we proceed with individual cases, recognizing the special circumstances of past return in each case, then why in making good past losses should we stop merely at the point of not making a deduction for depreciation? In a particular case, the amount of physical depreciation may be but a small part of the total past losses of the enterprise. Unless we undertake to make good all the individual losses, why vary from the general rule to the extent of the depreciation that might be involved? But if we attempt really to include all past losses in the valuation and to deduct all past excessive profits, we come to the total net sacrifice basis of valuation and strike the legal and practical difficulties that the method involves.

We should strike serious difficulties also if we were to attempt to base the deduction from the gross appraisal upon whether in the past a company had included among operating expenses provision for depreciation and had set up a depreciation reserve. Such provision may have been a matter of particular ability on account of profitableness, which, as already argued, should not be considered in the individual case; or more likely it was a chance procedure. Few companies have been accustomed to provide regularly for depreciation whether able to or not, so that the practice of a certain company would be too accidental a factor upon which to base deductions.

For the purpose of illustration, we may assume two properties of essentially the same character and with a like history of operation and construction, except that in one case regular charges had been made to operating expenses for depreciation and in the other not. If we were to make a property appraisal for each, would it seem reasonable to make a deduction for depreciation in the first case, but to allow the full cost new in the second?

What such procedure would amount to is that property acquired through operating charges would be excluded from the valuation, while if actually charged to the property accounts it would be included. It would be taking appearance for substance, placing a reliance upon past accounting which is not justified by fact. In the one case the property would be covered technically in the accounts by a reserve and in the other by securities or surplus. Is this not too accidental a matter to serve as a desirable basis of valuation?

If we made deductions for depreciation throughout, we should

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he treating all companies alike, neither penalizing past excellent practice nor granting a bonus for past negligence; we should simply proceed as if all companies had followed proper accounting methods. A company that has actually made full depreciation charges, has obviously accumulated full depreciation funds, which either have been put into new operating property or have been turned into outside investments. If the former, then clearly they have caused a corresponding addition to the gross appraisal from which the deduction is to be made, so that the company's capital has been fully maintained. If the funds have been put into outside investments, then they will bring corresponding outside income, and again the company will not suffer on account of the depreciation deduction.9 If there has been proper accounting throughout, the net replacement cost shown by the appraisal, plus any outside investment of depreciation funds, would equal the net direct sacrifice by investors. This, presumably, is the ideal figure on which a return should be based.

Suppose a company has not made depreciation charges. Then either a book surplus has been accumulated or larger profits have been paid out to investors. If the first, a book surplus is taking the place of depreciation reserve, which is merely a matter of terminology and accounting procedure, not of fundamental fact. Undoubtedly many companies have accumulated surpluses which were not really intended to be such, but rather were considered as providing for depreciation and contingencies affecting the physical condition of the property. Few balance sheet surpluses are intended to be shown as surplus in fact. If a company has a bogus surplus, why should it receive treatment different from what it would receive if more truthfully it presented a depreciation reserve?

But suppose that the extra profits shown through the failure to include depreciation charges in operating expenses, have been paid out as additional dividends to stockholders. Then the investors have obtained a greater return, and there is no reason why the appraisal should not be treated in the same way as if depreciation charges had been made. For if a deduction is not

<sup>&#</sup>x27;Special depreciation fund investments are usually not included in the valuation, nor is the income considered in the calculation of return. The investment, however, might well be included in the valuation; then the income should be included in the operating revenue. The net result, therefore, would be the same as in the current practice.

made, clearly a premium is paid for past low standards of mangement, and investors who have already obtained the greater actual income will therefore receive also the greater return for the future. Does that seem reasonable?<sup>10</sup>

In conclusion, it should be urged again that a clear single standard of valuation be adopted. If an appraisal method is selected, then either no deduction should be made for depreciation or it should be made throughout, whatever the history of the company as to returns or operating and accounting practice. If we wish really to control the return on investment, we must adopt simple, clear, workable methods. We should be just to investors, but, as urged repeatedly in this paper, we should not defeat the social purpose of regulation by too narrow regard for individual justice. All we can reasonably expect, if we wish to clear up the present confused situation, is to provide substantial justice in respect to past investment. As to the future. we should formulate clear and definite rules, so that investors may know exactly the terms at which they put their capital to the public service, and so that we may regulate the whole matter of return by means of accounting control.

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<sup>20</sup> A company may have charged the cost of all replacements to operating expenses instead of depreciation, and have thus followed really an irreproachable accounting method. A property may, of course, be fully maintained as well by the one method as the other. But even so, if the depreciation reserve is deducted from the primary valuation in the one case, there is no reason why a similar deduction for the physical state of the property should not be made in the other, unless service rates had actually been lower because of the particular method followed. But it can not be seriously claimed that any past accounting methods have had any clear effect upon rates charged to the public.

## MARKETING FARM PRODUCE BY PARCEL POST AND EXPRESS

One may well wonder if future economic historians will not be tempted to characterize the present decade as an anti-middleman era. In the minds of many the most effective way to combat the high cost of living is to put into effect the popular slogan, "Down with the middleman." Since food-stuffs form such an important item in the list of ordinary necessities, this agitation has resulted in a widespread demand for the direct marketing of farm produce.

This sort of marketing may be accomplished in three ways. One that is little used is the peddler system by which the producer delivers directly to the door of the consumer. Another means is through the agency of a market place where the producer and consumer meet on neutral grounds, so to speak. The third and most recent development in the direct marketing of farm produce, and the one receiving much publicity at the present time, is by means of transportation agencies-parcel post and express. It is with this type of direct marketing that this paper deals. The reader should bear in mind that all discussions concerning these agencies have reference to their efficiency and capacity as carriers of farm produce in small lots, and not to the carrying of other classes of commodities.

Since the days of the granger movement the farmers have been persistent in their demands for the parcel post. Some two years ago their persistence was rewarded, and with the inauguration of the parcel post came a revision of express rates which makes those companies strong competitors with the postal system as a direct marketing agency. But even in this state of competition it is safe to say that the parcel post in its present stage of development has not fulfilled the expectations of the farmer as a selling agent, however useful it may be to him along other lines.

The department of agricultural economics at the University of Wisconsin questioned over 200 farmers in the state who had some six months previously advertised their willingness to sell direct to the distant consumer. Out of this number only 62 had made shipments, and some of these discontinued the practice after a brief trial, while others merely dealt with city relatives. Many of the farmers had received inquiries concerning prices but no orders in answer to their quotations. The producers generally were of the opinion that this lack of orders was due to the

consumer's "wanting the stuff for nothing."

Questionnaires and interviews with consumers who had purchased by this method also revealed a general dissatisfaction. Their attitude seemed to be caused largely by the high prices paid for produce procured in this manner. These discouraging experiences tend to show that the value of transportation agencies, in their present stage of development, has been greatly over-emphasized with respect to the marketing of farm produce. However, this is far from saying that their use under present conditions can not be made more satisfactory. The following discussion is an attempt at an analysis of the factors involved in the from-producer-to-consumer marketing by parcel post and express with a view to a better understanding of their use.

## The produce.1

Quite contrary to popular belief very little of the farmer's produce fulfills the exacting requirements of long distance buying and selling in small lots. Since the minimum charge for parcels by mail is 5 cents for the first pound, followed by much less for additional pounds, it is clear that either the article must weigh several pounds so as to go for much less than 5 cents a pound, or it must be worth several times 5 cents per pound in order that the postage be not too great to make the shipment desirable. This principle puts a very great limitation on the widespread use of the parcel post for the shipment of farm produce.

First of all the produce must be of a type that has a high value as compared with bulk. One of the great drawbacks to parcel post and express shipments is the large proportion of the value of the shipment taken up by package and transportation charges. For instance, the cost of fresh vegetables at times when they are plentiful is more than doubled in many cases by the cost of packing and getting them to the consumer. This extra charge that must be added to the consumer's price raises commodities of a low value to a prohibitive figure.

<sup>1</sup>The following table shows that only about one eleventh of the farm crops could by any possibility come within the realm of parcel post and express shipment. However, but a very small part of this one eleventh can r

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Not only should the article be of fairly high value, but its supply should be more or less constant, not of short seasonal duration. Every time an individual grower has a different article to sell to distant customers, he must spend time and energy in providing the outlet for the commodity. Hence the expense of introducing a vegetable, a fruit, or a farm product of limited supply and short seasonal duration adds noticeably to the consumer's price of that food. Moreover, something to sell one week and nothing the next will neither get nor hold customers. The grower must have a dependable supply if he is to fit himself into the requirements of the buying public. In general, of the things grown by the average farmer, poultry and dairy products best fulfill the requirements of a high value and steady supply. However, it must not be inferred that these are the only things that may be handled successfully, since general disadvantages

ever be actually so marketed. For example, vegetables, fruits, nuts, flowers, and the like, are not often handled in this manner and the prospect of their being so handled in great quantities is remote. In fact, not a single commodity in the list is as economically shipped by these means as in the more usual way, by freight, and therefore it may be expected that the bulk of them will be so moved.

Farm crops in their relation to parcel post and express marketing.

	Per cent of value of all crops	
Crops	Adapted to parcel post or express shipment	Not adapted to parcel post or express ship- ment
Cereals		48.6
Other grains and seeds	.3	1.4
	(grass, flower, and vegetable seeds)	
Hay and forage	***	15.0
Tobacco		1.9
Cotton	***	15.0
Sugar crops	.1	1.1
	(maple sugar)	
Sundry minor field crops		.9
Potatoes		3.6
Vegetables	3.9	***
Fruits and nuts	4.1	***
flowers, plants, and nursery products.	1.0	***
Farm forest products		3.6
	9.4	90.4

are often overcome by highly favorable circumstances in individual

Whatever the type, the quality must be of the best, or at least be constant. An industrial agent for one of the larger express companies when asked what he considered to be the greatest handicap to parcel post and express marketing, replied: "The producer's shortcomings with respect to quality." The agent explained the phrase by relating some of his experiences in the matter. When customers are obtained for the rural shipper the goods in the first orders are quite satisfactory. Satisfactory goods cause an increased demand. An increased demand is too often followed by a decrease in quality. Rather than reject an order, it is filled with such grades as are at hand or can be purchased from the neighbors. Actions of this nature are suicidal to the farmer's success in the new movement. People will not give milk-fed rates for just any chicken, or strictly fresh prices for eggs of doubtful age. In other words, the lack of appreciation of quality as a factor in price is undoubtedly one of the most serious difficulties in the path of direct

Another of the handicaps to long distance marketing, from the consumer's point of view, is the want of a system or device by which varying grades in quality may be known. This handicap has been overcome in many lines of merchandise by the establishment of well-known brands. Buyers know that the quality of goods sold under these brands will be substantially the same next week as last week. As yet, the buyer of farm produce from the grower has not the assurance that the butter and poultry which he buys today will be of the same quality as the butter and poultry he bought yesterday. But until the shipper has established a reputation for strict standardization of quality, his sales must be subject to inspection, a condition which fits awkwardly into direct marketing at a distance.

Another element, equally important to the farmer's success in this undertaking, is packing. It is necessary for him to study carefully the details of packing in order to avoid the undesirable mingling of flavors in transit. There is also much importance to be attached to the mere appearance of the goods. The shipper must remember that he is a seller of freshness, and in the minds of most buyers only those things are fresh that appear so.

Hence, packing must be done in such manner as to perform three functions: to prevent the objectionable mingling of flavors; to keep the articles intact; and at the same time to give the package a favorable appearance.

### The producer.

The type of produce adapted to direct marketing, together with the grower's ability to fufill the exacting demands of the consumer, clearly indicates that the process is best suited to the specialized producer. The attention of the successful grower must be centered upon the raising of a superior quality of such things as may be conveyed to the consumer at the least expense, compared with the value of the contents of the shipment. Not only must the shipper be a specialized grower, but he must have the inclination and ability to cater to the retail trade. When a farmer ceases to sell his produce at wholesale to the local grocer, and disposes of it to the consumer instead, he becomes a retailer, and must assume some of the responsibilities of that office—dealing in small lots, catering to whims, and satisfying complaints. Moreover, he must acquire business customs and methods, for not until the producer is willing to handle detailed accounts, render accurate statements, and answer correspondence promptly, can he hope to attain a large degree of success in the direct marketing of small lots.

### The location of the producer.

Although type of produce and personal initiative are large factors in this new movement, the location and the physical environment of the farmer are of primary importance in producer-to-consumer selling. Following are a few principles to be considered in respect to location:

1. Direct marketing outside of local territory should not be attempted until the possibilities of the home market have been thoroughly investigated.

2. The grower should live within easy access to the station from which he ships. Even though the rural carrier collects the goods it is not well to have a perishable product submitted to long hauls over country roads.

3. The market should be at a distance ordinarily not exceeding 200 miles, since the transportation charges beyond that distance make prices more prohibitive.

Obtaining the customer.

The testimony based upon actual shipments by farmers concerning the feasibility of direct marketing is rather scarce and varied. Instances of exceedingly successful experiences, and also of miserable failures in the marketing of the same kinds of produce are easily obtainable. These diverse results would seem to indicate that success is due in a large measure to the personal qualities of the shipper. Possibly one of the first difficulties which the farmer meets in the new enterprise is getting into business relationships with city customers. This is a matter in which generalized advice is of little value. It is a situation which must be solved, for the most part, by the inventiveness of the shipper. This problem may be worked out along the lines of personal solicitation, correspondence, press advertisement, post-office lists, or the industrial departments of the express companies.

The effectiveness of correspondence depends quite largely upon the character of the mailing list; that is, whether or not it contains only the names of those interested in direct marketing. However, the amount of produce which the ordinary farmer has at his disposal at any one time, is not great enough to justify a very large expenditure for advertising purposes. Consequently neither correspondence nor the press enters very extensively into

the marketing arrangements of the producer.

Because the present development of producer-to-consumer marketing does not justify sufficient expenditures on the part of the grower to get in touch with the consumer, some of the post offices in the larger cities are compiling lists of the names and addresses of producers together with the commodities they have to sell. These lists are distributed free among the patrons of the office.

Three express companies also have established departments for the purpose of introducing the farmer to the city dwellers. These companies maintain industries agents in the larger cities along their lines. For instance, one company has departments at New York City, Cleveland, St. Louis, Chicago, Houston, San Francisco, Kansas City, and Seattle. Circulars are sent from these points every Monday morning to the companies' local agents throughout the country. These circulars contain descriptions and quotations of food products which the growers have furnished, and at which they are willing to sell for the current week. With

this information at hand the local agent will take orders to deliver any of the products enumerated. It must not be inferred that the express companies buy or sell produce or share in any profits from the sale of goods. The shipper quotes prices on his own products and the companies issue these prices in circulars, merely receiving transportation charges on the goods they carry. These industrial agents also compile lists of the names of consumers who wish to buy through this method, which they furnish to reliable shippers who care for such an outlet for their products. Furthermore, it is the aim of these departments to aid the shipper in standardizing his product, as well as to help him find suitable packages and containers for shipping the same. At present the express companies are active agents in the promotion of the direct marketing movement. One can hardly say as to the future of their produce ordering departments. Up to date, neither the producer nor the consumer has to any great extent availed himself of the services offered by the companies.

### Ordering from the producer.

The system of ordering directly from the farmer demands a change of method in buying kitchen supplies. The housewife is in the habit of buying small quantities at frequent intervals. In fact, very few houses are so equipped as to permit the keeping of perishable food products in large quantities over any considerable length of time. The telephone plays a large part in the ordering from grocers: it is a great time, money, and labor saver. In but few instances can the telephone be used in ordering goods to come by parcel post or express. It is the usual practice thus far to depend on ordering by mail, from time to time, or ordering by contract for periods of considerable length in advance. In the case of mail ordering it is necessary to anticipate wants by several days, since it often takes a letter two days to reach rural delivery points even though but a hundred miles distant. Then the packing, mailing, transportation, and delivery of a parcel by post is likely to take anywhere from one to three days. Thus from the time of writing the letter until the time of receiving the goods two to five days will have intervened.

Aside from the factors of time and trouble involved there are the questions of price and quality. An individual producer may be able to get fancy prices for very ordinary goods; he may feel that prices must be raised at a given time. He may be

anxious to furnish produce of the very finest quality but may be frequently unable to do so. The purchaser not being in direct easy communication with him can not be informed each day as to changes in price or variation in quality. The matter of prices is not insurmountable. It would be altogether feasible to fix prices, say for a week, and notify by postal card when changes are to be made. The problem of quality is not so rapidly solved. In the case of produce not of a standard nature, quality will vary with the season or the weather or a multitude of other more or less unforeseeable circumstances.

One serious drawback encountered is the difficulty of deciding how much of certain things are to be wanted from day to day, particularly for a period of time some days in advance. Years ago when supplies had to be of a fairly stable nature, dried fruits, salted meat, and the like, it was not hard to order a week or a month in advance, but these are no longer popular. Hence it follows that only a part of such supplies as may be received direct from the farmer will be so obtained. Substantially every family will continue to depend to some extent on the local merchants even for dairy and poultry products. The system of ordering by contract can be adapted to but few articles.

### Payments.

Then there is the question of payments. Nearly all long distance marketing in small lots is done on a cash basis, and farm produce can not be taken as an exception. Consequently the consumer must expect to send cash with order or pay upon arrival of goods, unless there is an established credit relationship between seller and buyer. Such relationships can undoubtedly be built up, and will be, but as yet they are the exception. It takes business ability and persistency to bring such arrangements to a working basis.

Parcel post or express?

One of the questions which confronts the farmer is: "Which carrier will answer my purposes best, expense and service considered, parcel post or express?" Whether or not it will be to the shipper's advantage to patronize the public or the private agent will depend upon a number of factors, of which distance, weight of shipment, and kind of produce are the most influential.

The movement for the direct marketing of farm produce has been greatly accelerated since the extension of the parcel post weight limit to fifty pounds (January 1, 1914) and the revision of express tariffs by order of the Interstate Commerce Commission.

TABLE I .- A comparison of old and new express rates on farm produce.

Weight	50 mile		100	mile	200 mile		
of shipment	Old	New	Old	New	Old	New	
Lbs.	Cents	Cents	Cents	Cents	Cents	Cents	
5	35	25	85	25	35	27	
10	35	25	85	25	35	27	
15	85	25	85	27	35	82	
20	35	27	35	29	35	36	
25	35	28	35	31	85	41	
30	85	30	35	88	36	45	
35	35	32	35	36	42	49	
40	35	34	35	39	48	54	
45	35	36	35	41	54	58	
50	35	38	35	43	60	62	
55	35	89	35	* 46	66	66	
60	86	42	86	48	72	71	
65	39	43	39	51	78	75	
70	42	45	42	53	84	79	
75	45	47	45	56	90	84	
80	48	49	48	58	96	88	
85	51	51	51	60	102	93	
90	54	58	54	63	108	96	
95	57	54	57	66	114	101	
100	60	57	60	68	120	105	

### Express rate revision.

A lowering of rates was announced by the express companies to take effect February 1, 1914. And on September 1, 1915, they again revised their rates, raising them somewhat but not so high as they were before February, 1914. Just how great a reduction the companies made is plainly shown by Table I and Figures 1, 2, and 3. Distances of 200 miles and less are taken for graphic illustrations, because in general, direct-to-consumer shipment of farm produce is hardly practical over wider areas. For the same reason 100 pounds is selected as the weight limit.

The new rates on 50-mile consignments are lower on packages weighing less than 43 pounds (the parcel post weight limit is 50 pounds for this distance) and higher on shipments weighing between 43 and 90 pounds. Presumably the express companies are the sole carrying agents for those shipments which fall outside

FIGURE 1.—Old and new express rates—50 miles.

The new rates are materially lower on packages weighing under 43 pounds.

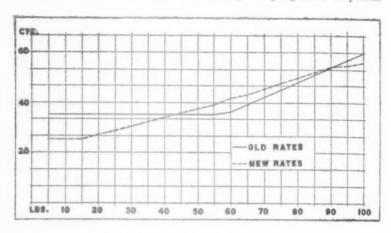
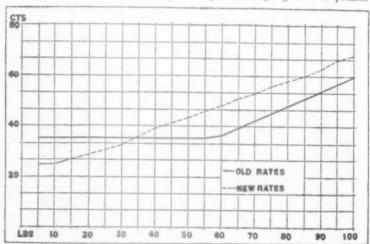


FIGURE 2.—Old and new express rates—100 miles.

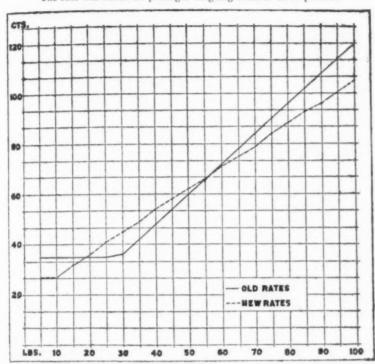
The new rates are considerably higher on parcels weighing over 35 pounds.



mail specifications and are not adaptable to freight transportation. It will be noticed that it is mainly within this monopolistic field that rates have been increased by the recent revision for the above distance. Strictly speaking, the term "lower rates" can be applied only to parcels weighing less than 35 pounds when

FIGURE 3.—Old and new express rates—200 miles.

The rate was raised on packages weighing from 19 to 55 pounds.



expressed for a distance of 100 miles. Again, one finds in the comparison of the old and new rates for a distance of 200 miles, that there is a decrease within the field of parcel post competition. The lower rate applies to packages weighing less than 19 and over 55 pounds. The parcel post weight limit for distances beyond 150 miles is 20 pounds. This decrease in express rates is made up partially, at least, by the increased charge on packages weighing from 19 to 55 pounds.

A study of these comparisons will lead one to conclude that the lowering of express tariffs has been effected mostly in those fields where competition is present. Whether or not the revision can be referred to as "downward" is a question that can be answered only by knowing whether the surplus received from the business done in the region of increased rates is greater than the difference resulting from the handling of business in the zones

TABLE II .- A comparison of parcel post and express rates on farm produce.

Weight	Local		50 miles		100 miles		200 miles	
of shipment	P. P.	Exp.	P. P.	Exp.	P. P.	Exp.	P. P.	Exp
Lhs.	Cents		Cents	Cents	Cents	Cents	Cents	Cent
5	7		9	25	9	25	14	27
10	10		14	25	14	25	24	27
15	12	No.	19	25	19	27	34	82
20	15		24	27	24	29	44	36
25	17	rates	29	28	29	31		41
30	20	69	84	30	84	88		45
35	22		39	82	39	86		49
40	25	for	44	84	44	89	W	54
45	27	this	49	36	49	41	Weight	58
50	80		54	38	54	43	D.	62
55		class	_	39	-	46		66
60	1 3	255	2	42	3	48	limit	71
65	e e		90	48	89	51	Cat.	75
70	Weight limit	of	Weight limit	45	Weight	53	20	79
75	=	traffic	200	47	Seed t	56		84
80	B.	=	В.	49	limit	58	pounds	88
85	64	O		51	64	60	a a	98
90	50		50	58	50	68	ds	96
95 100	lbs.		lbs	54 57	Ibs.	66 68		101 105

of lower charges. In other words, do the commission firms and other shippers whose traffic is of such nature as to come largely under the increased rate pay a greater aggregate amount than the small shipper is relieved of paying by the lesser charge? Yet this item is not of as much interest to the farmer as the fact that the express rates on relatively small shipments within a distance of 150 miles are materially lower than formerly and that the new rates are conducive to the direct marketing of farm produce.

### A comparison of parcel post and express rates.

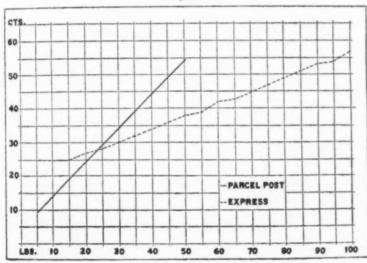
One may wonder how the new express rates will appear when measured by the standard set by the Post Office Department on the same class of commodities. This comparison is made in Table II and illustrated in Figures 4, 5 and 6. In the matter of local consignments the parcel post has the field. The postal service will collect from the producer in the country and deliver to the consumer in the city in which the rural route terminates, packages weighing 1 to 50 pounds at a cost of 5 to 30 cents. The express companies are in no way prepared to handle this class of business.

For shipments of 50 miles or under, the parcel post has the cheaper rates for packages weighing 24 pounds or less. When goods are sent 100 miles the mail is a less expensive carrier for shipments weighing not more than 28 pounds. But if 200 miles is taken, or any distance beyond the first and second zone (150 miles) the government can hardly be called a successful competitor against the express companies in the matter of handling country food-stuffs, since the postal rate is lower on packages weighing 13 pounds or less only.

Hence, if the only consideration is rate charged, one can safely conclude that the parcel post is the proper carrier for lighter shipments traveling shorter distances, while heavier packages consigned to wider areas should go by express.

Figure 4.—Parcel post and express rates—50 miles.

The parcel post offers a cheaper rate for packages weighing less than
24 pounds.



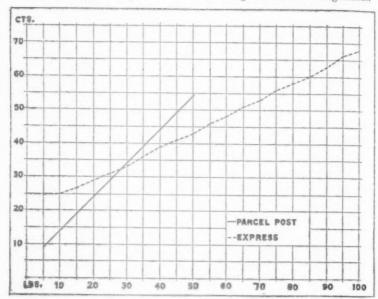
### Other factors.

The matter of rate schedules is not the only item to be taken into account. The methods of handling the traffic are so different in the two institutions as to make the service of one highly desirable in an instance when the service of the other is hardly deserving of consideration.

Perhaps the greatest advantage of the parcel post to the

FIGURE 5.—Parcel post and express rates—100 miles.

Uncle Sam offers the cheaper rate on shipments weighing under 28 pounds, while the express companies offer an advantage on heavier consignments.



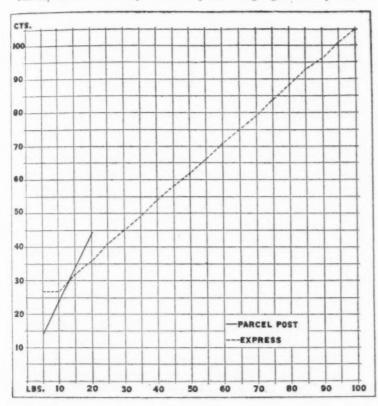
farmer is its collections and deliveries in the country. Yet the merits of this service have been somewhat over-estimated in the matter of the shipment of perishable commodities. Few producers will burden the rural mailman with a consignment of butter when he is some hours from town and the prevailing temperature is 95 degrees in the shade and 99 in the carrier's vehicle. Neither would it be wise to allow him to haul a setting of eggs over 15 miles of rough country roads whether the mercury was favorable or not. Hence, the value of rural collections and deliveries is somewhat dependent upon weather, roads, and time limits in regard to food-stuffs.

In general, fragile articles are better cared for by express companies, because of the separate handling of each package. Although all fragile articles sent by mail are labeled as such, and the bags in which they are placed similarly marked, nevertheless, the strain and jar are more severe on parcels transported loosely in mail sacks than when handled individually. The postal department has issued a recent ruling to the effect that eggs in lots of 20 pounds or more will be conveyed outside of bags. This is a marked improvement.

Because of postal restrictions, express carriers have a monopoly on those parcels containing live animals or exceeding 72 inches in combined length and girth measurement. Many poultry

FIGURE 6.—Parcel post and express rates—200 miles.

The express has the cheaper rate on parcels weighing over 13 pounds.



authorities also advocate the shipment of setting eggs exclusively by express.

Despite recent parcel post developments the express companies are factors in the direct shipment of country produce. Which of these two carrying agents—parcel post or express—is more adaptable to the needs of the farmer is dependent, to a large

extent, upon individual circumstances. However, the parcel post should be given its just share of credit for instituting those advantages which the express companies are offering to the farmer in the line of lower rates and improved service.

Collection and insurance charges.

If the grower has not an accredited list of customers he will usually insist upon cash accompanying order, or that the goods be sent C. O. D. The former method is preferable since checks or even money orders cost less than C. O. D. services. Many people are averse to paying for goods before they receive them, and therefore order C. O. D. Yet in case of shipment by parcel post they hardly gain the point, since under this plan they are not permitted to examine the shipments until after the charges are paid. Shipments by express may be examined before payment is made provided the shipper so specifies.

If a credit business is done an extra charge must be added to cover probable losses. Whether this charge will be greater or less than the cost of C. O. D. service is a matter that will vary greatly with the individual shippers. Shipments may be sent C. O. D. by parcel post for an additional postage charge of 10 cents providing the amount to be collected does not exceed 100 dollars. This fee also covers insurance to the amount of 50 dollars. Express companies charge a somewhat higher price for their collection services. Their C. O. D. rates are as follows: for collections of 2 dollars or less, 15 cents; for collections of 2 to 6 dollars, 20 cents; for collections of 6 to 50 dollars, 25 cents.

Express companies are liable for any damage received by goods while entrusted to their care up to the amount of 50 dollars.

Parcel post packages may be insured against loss, but not partial damage, by paying a fee of 3 cents for values not exceeding \$5, 5 cents for values not exceeding \$25, 10 cents for values not exceeding \$100 in addition to regular postage. The sender may secure a return receipt by endorsing the parcel: "Return receipt desired."

In case of total loss, indemnity is paid for the actual value of the package, not to exceed the limit of insurance. No indemnity is paid for partial damage or for labor involved in repairing a partially damaged article.

Produce carriers and containers.

The farmer who contemplates entering into the direct market-

ing of country produce has the fundamental proposition to consider: In what size and style of package can my produce be sold to the best advantage?

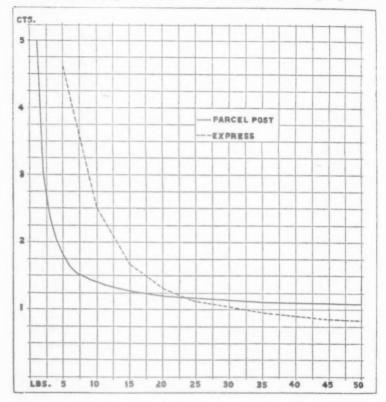
Although the from-producer-to-consumer movement has poured a deluge of parcel post and express containers upon the market, a majority of them are still in the experimental stage of development. The Wisconsin Agricultural Experiment Station has made an extensive collection of such boxes, but of the entire lot only a few seem practical for the purpose for which they are intended. A general fault of containers is that they are too small. The specific value of raw food-stuffs is not high enough to stand transportation and packing charges when handled in such small lots as butter in one-pound packages, eggs one dozen at a time, to say nothing of vegetables in small quantities. Moreover, the ordering and collection troubles are as great on small as on large orders.

The transportation rate per pound decreases as the weight of the shipment increases. A one-pound package sent by parcel post within the first or second zones costs 5 cents, while a 50-pound package costs only a slight fraction over one cent per pound for the same distance (Figure 7). This rule holds true of container charges. A one-pound butter box costs about 2½ cents, while a 10-pound box of the same type sells at only 4½ cents, or less than ½ cent for each pound of butter it contains. These proportions are graphically illustrated in Figure 8.

The objections growing out of high proportional charges on small shipments may be overcome by organization at one or both ends of the line. In many cities are to be found "neighborhood clubs," which consist of groups of consumers loosely organized for the purchase of produce. By this method it is often possible to take advantage of the lowest rates for both transportation and container, and also to minimize the incidental trouble and cost of ordering. These advantages are usually gained at the expense of trouble and care on the part of some member of the group who, usually without pay, acts as a middleman in ordering, receiving, and distributing the produce. There are hundreds of such clubs in the larger cities, many of which have been in existence for a year or two. Apparently some of them will become permanent. It would seem that corresponding clubs of producers might be formed in order to mass shipments and save

Figure 7.—The transportation rate per pound on packages of different weight—100 miles.

The heavier the shipment the less is the transportation cost per pound.



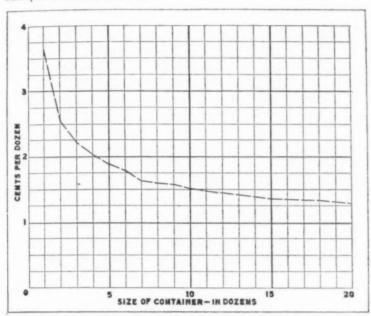
time, trouble, and money, but thus far only the barest beginning has been made.

The mission of producer-to-consumer marketing.

What are the benefits to be enjoyed by the direct-to-consumer marketing plan? Does it fulfill the many claims of higher prices to the producer and lower rates to the consumer? Unquestionably the farmer is entitled to more for his goods when sold in this manner because of the extra attention required in putting up individual orders, the expense involved in closer grading, the labor of careful packing, a margin for credit losses, and the replacement of damaged goods. The producer must have a higher

Figure 8.—The cost of egg containers per dozen eggs for different size cases.

The greater the capacity of the container the less the cost per unit of value contained. This chart is based upon the price of corrugated board carriers when purchased in lots of 100.



price in consideration of services rendered. Whether or not the surplus received will compensate him for his trouble is a matter dependent upon the individual and his access to favorable markets by other means. What the farmer really does is to change from a wholesale to a retail method of marketing his produce. It is a well-known fact that wholesale margins of profit are relatively narrow and retail margins relatively wide. Hence it is altogether probable that the farmer in making the transition from the wholesale to the retail trade will be more than likely to fall heir to a share of both the good and the bad properties of the latter. He will have the petty details, annoyances, and expenses of the retailer, and for these he will probably have to be paid.

As to the consumer, one can hardly figure a reduction in the high cost of living. For instance, let us approximate the cost of container and the postage within the first and second zones on two dozen eggs—a fair example. Containers of this size, if

bought in lots of 100, will seldom cost less than 5 cents. The postage on two dozen eggs will amount to 9 cents, making a total transportation charge of 14 cents, or 7 cents per dozen. Add this amount to the wholesale market price of eggs, plus the surplus paid the farmer for his extra time and labor, and the sum will probably equal the rate charged by the retail grocer.

Yet one should not condemn the direct marketing of farm produce on the ground of increased cost. The excess charge may, it is true, be offset by quality. But the point still remains that the parcel post in its present state of development will not reduce the high cost of living; better stated, it will contribute to the cost of high living. Nevertheless, it has a mission to perform. Many people insist upon fresh food-stuffs, and in order to secure them they are willing to pay for the freshness. Hence, the continued use of the direct-to-consumer method of marketing will not be because the mails offer a cheaper means of marketing, but because it satisfies the desires expressed in such attractive phrases as, "Fresh from farm to family."

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#### A DESCRIPTION OF BILLS OF EXCHANGE, 1559

In 1559 Rabbi Jehiel Nissim da Pisa wrote a compendium of the Jewish laws of usury, treating of the practices forbidden by biblical law or rabbinical enactment. He called his treatise Hayye Olam, Eternal Life, from which, according to the Jewish conception, neglect of these laws would bar the transgressor. As to his aims, the author expresses himself in the following interesting statement:

Since in this country the custom of lending money to gentiles has spread more than in all the other parts of the Diaspora and since through that they are led into collision with the prohibitions of the Scriptures, I have felt myself compelled to prepare a short compendium, devoted to these laws exclusively, which everybody will be able to consult without difficulty. . . . In our times and our country, where money negotiations form the occupation of the people, by which they carn their livelihood, such a treatise, as concise and at the same time as complete as possible, is absolutely necessary, so that the people may keep away from this great sin.

Rabbi Jehiel Nissim was a most competent authority on the subject, being a member of an old family of bankers 1 and a prominent banker himself and possessing at the same time a broad Hebrew education which enabled him to exercise the functions of a rabbi in his city.

The fifteenth and last chapter of his code, preceding his long conclusion, the rabbi devotes to a description of the bills of exchange, which may be of some interest for the historian of economics, since as far as I can ascertain, it adds some new data to our knowledge and in some details supplements the excellent description of banking at that period in Ehrenberg's Das Zeitalter der Fugger (Jena, 1896). The historical points mentioned in our text are fully discussed there. <sup>2</sup>

Jehiel Nissim's laws of usury were never published. The following free translation of chapter 15 is based on a copy of the original manuscript written in Bologna in 1566 and acquired

<sup>1</sup> See Umberto Cassuto, La famiglia da Pisa (Florence, 1910), where the whole literature is quoted; about our author ibid., pp. 52-56.

<sup>3</sup>Cf. vol. II: p. 68 et seq. about the importance of Lyons; p. 147 et seq. about the financial crises. The description of the "Ricorsa Wechsel" (ibid. p. 79-80) ought to be compared with ours.

\*For a description of the manuscript which contains also several other treatises of the author, see Cassuto in Rivista Israelitica, X (Florence, 1913), pp. 49-50.

lately for the library of the Jewish Theological Seminary of America at New York. Two other manuscripts of the treatise are known, one in Parma, the other in the Guenzburg Library in St. Petersburg.

ALEXANDER MARX.

## Translation of Text

It is unnecessary for practical purposes to speak of bills of exchange, which are called in Italian cambio, for they are not current among the Jews of our time, nor did they exist in the time of the old codifiers and authorities. But, as they may occasionally be in demand, I have thought it best to explain their theory so as to show whether it is permitted or forbidden to make use of

There are two kinds of bills of exchange. The first is called bill of exchange, plain and simple. To give an example: A, who lives in Florence, possesses 100 scudis which he has to pay at Venice. He goes to B and says to him: "Here are 100 scudis. Give me a draft for that sum on your partner in Venice to pay them to me or to my representative." B agrees to this, accepts the money, and gives him a draft on Venice. For this he charges 2 or 3 per cent or thereabouts. Such a transaction is entirely permissible, because it can in no way be looked upon as a loan. A's reason for coming to B is only because he does not care to send the money to Venice, thus incurring the risk of travel and other dangers. He therefore gives the money to B, who ultimately gives him in exchange as many scudis as he received. If A should engage a messenger to take the money, it would involve expense and possible loss. To escape this, he gives the money to the banker, to whom he pays a trifle, and who agrees to make the payment on his behalf at the place where it is due. If, however, the banker should take something for making the payment in Florence itself, that would certainly be forbidden, for, in this case, he would only pay for postponing his own payment in Venice.4 Although we consider a gold-dinar fruit, as we have previously explained, this transaction seems to me to be permitted, because the bill of exchange is not a loan to which the law of the Torah refers.

The second kind of bill is called "real bill of exchange"-in Italian, cambio reale. I will explain its form because many people

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find difficulty in understanding it; although it seems superfluous. since we have touched on the subject, we may as well discuss it. It is well known that generally business is carried on between merchants by delayed payments and on credit. Usually they give cloths, silk, and other goods on credit for a year or so, and can not collect their money before the end of the term agreed upon. and even then it comes in slowly. Meantime, the merchants are in need of ready money to enable them to carry on branches of their business, such as purchase of cloths and silks, chartering of ships, payment of duties, etc. If they could not find some one to advance them money for their enterprises, all business would be constantly going downward. Therefore, they invented a method enabling them to procure the money at a small rate, which, however, does not look like usury. Four Fairs were arranged in every year to take place at intervals of three months; and in every important business center there are bankers who advance money to those who need it, in a way we are about to explain. In Italy, these cities are Rome, Naples, Genoa, Venice, Florence, Lucca, Milan; in Spain, Barcelona, Valencia, Seville, Valladolid; in Flanders, Antwerp, a place of large money transactions and great importance; in Portugal, Lisbon; but the most important center in all the Christian countries is Lyons, in France. There are the seats of the business men of every nation and tongue, and according to their decisions the bills of exchange are fixed. To give an example: If somebody needs 10 marks in gold, in Lucca or Florence, he takes them at the rate of exchange of the mark in that city; say, 61 or 611/2 and sometimes 63 and so on, and he gives a draft on his partners in Lyons that they shall pay 10 marks at the time of the next Fair. There the rate of the mark is always 65 scudi, never more nor less, for the city of Lyons is like the center around which everything turns.

At the end of the Fair the merchants from all countries gather together and consider how large the demand for gold from Italy, Spain, Germany, London, and other places is. If the demand is great and on the Lyons market there is but little gold compared with the amounts needed to cover the payments, they figure the value of the mark in these countries at the rate of 61 or 61½ or 62, etc. Accordingly, whoever takes a mark gets it at the above rate and pays in Lyons at the rate of 65. If, however, the demand is small and only few look for money, while there is much gold on the market and the king is not in need of money

because he is not engaged in a war, the rate of the mark in Italy rises to 63 or 64, etc.; and the difference between one city and the other is slight, say between Florence and Lucca 1/8 of a scudi or 1/4 for a mark. In this case, those who take a mark lose little, for the difference between 63 or 64 and 65 is slight. If, however, the demand is great and many ask for money, then the rate of the mark goes down, and the bankers pay to those who buy a mark only at the rate of 61 and 611/2 etc. so that those who buy money lose much, i.e., the difference against the 65 which they have to pay in Lyons at the time of the Fair. Sometimes the market is so easy that the rate becomes the same as that at which the mark was bought in the other countries, so that one who has bought a mark loses nothing. It may even happen that the market is so very easy that the rate of the mark in Italy and elsewhere rises to such an extent that when the time of the payment in Lyons arrives some profit is realized. That, however, happens very rarely, but once in fifty years.

At the end of the Fair letters are sent to all the cities of Italy, Spain, and Germany, and the other countries, that the bankers may learn whether to raise or to lower the rate of the mark. All this they do with the purpose of creating a method enabling the merchants to procure money without difficulty. These matters are subject to ingenious speculation and great foresight, for there are experienced business men who see ahead with their spiritual eye coming events, calculate beforehand that the rate of gold will rise, and buy up all the money that is on the market or a large part of it. Not a day do they allow to pass without raising the rate of the mark 1 or 11/2 scudi, and they profit by the difference; many a man has acquired great wealth by these The opinions of Christian scholars on this point are divided, some claiming that it is forbidden to sell money according to this method because of usury, and others maintaining that it is permissible on the ground that those who sell the mark sometimes lose a little, although this is a matter of rare occurence, and that sometimes the rate becomes the same. Because they run the risk of losing as well as gaining, in their opinion it is not to be considered as usury. The custom of selling money in this way has spread throughout all Christian countries and no one protests against it any longer.

There is still another kind of bill of exchange which is called "dry exchange." If the merchant who is in need of money has

no partner in Lyons or elsewhere to pay for him, and, further, he has no credit with the merchants, he gives securities to a banker and says to him: "Lend me 1000 scudis which I will accept at the rate to be determined for the mark, and I will pay you back at the rate of Lyons." This is called "dry exchange," since it is not the real exchange which is customary among merchants. And many men of prominence and high standing refuse to give money in this way; especially those who wish to pose as saints and who tremble for their souls claim that this is usury. They give their money only against a real bill of exchange, as explained above, or they lend it in enormously large amounts to the government or to the great nobles. This the Genoese did who gained enormous wealth, tens of millions, by their vast loans to Emperor Charles (V), and they claim that they have the permission of their Pope, because they run the risk of its happening that the king can pay them neither capital nor interest, as, indeed, it did happen when the king of Spain (Philip II), the son of the Emperor, remained debtor for enormous sums, as well as with the French king (Francis I), who remained debtor for large amounts. It is on the basis of such facts that these transactions are permitted. according to their religion.

To return to our subject: I should declare the buying of the mark absolutely forbidden among us, because we follow the principle that money is to be considered like fruit; therefore, such an arrangement is like lending fruit with the stipulation that fruit be returned (after the market price has risen). This is the kind of usury which the Torah has forbidden; for A receives from B a mark at the rate of 61 or 62 etc., and after three months he returns him a mark which is worth 65. Therefore, the only way permitted is as with fruit, viz., that he return the mark at the place of the loan at the rate of 61 or 62, etc., and pay back as many gold pieces as he received, just as is done in the case of fruit. If the price has gone down, he pays back fruit, and if the value has been determined upon at the time he pays the value.

Having spoken on the subject of bills of exchange and explained their theory, we shall now, in order not to leave anything doubtful, discuss another subject, namely, that of ship-insurance. This is done in the following way: It is everywhere customary among merchants who send merchandise oversea, to wish to avoid the responsibility for the whole of the merchandise, on account of the numerous dangers of the sea, such as storm, pirates, or fire.

Therefore, a group of people take upon themselves all the risk for any damage that may happen to that merchandise, each one taking a certain amount, either small or large, as he wishes. Now, for the responsibility thus taken during the transportation from place to place, they are paid hire (premium) of insurance according to the distance; say, from Leghorn to Naples, 7 per cent; to Messina or Palermo, 8 per cent; to Alexandria, 12 per cent; etc. All responsibility for any damage that may happen to either merchandise or ship, then rests upon those who have taken it over until it has reached its destination and the master of the ship has delivered the goods safely to the merchants who are to receive them. The underwriters are then free from responsibility, and have earned the hire they have received. There are many laws and ordinances dealing with this matter which differ in the different places, according to their customs. The chief authority which all the laws of ships, sailors and merchants follow is a book called Consulado de Barcelona. Should a litigation occur between the shipowners and merchants, the judges would proceed, according to laws contained in this code, for example: If it should be necessary, because of a gale, to throw the goods overboard into the sea, or if there should be a hole in the ship by which the water entered and damaged the goods, a dispute might arise between the owners, the underwriters, and the shipowners. All these and similar cases require a great deal of judgment and knowledge. In reference to these matters, I say that if one undertakes this risk and insures the goods against all damage, one is permitted to accept the payment; for this is only for the insurance and has nothing to do with a loan. Further, as soon as a ship reaches its destination, the goods are delivered in their original form to their original owners or to others they have designated, and in undertaking the insurance an underwriter takes the risk as well as the gain; therefore, there is no suspicion of a forbidden act in this, even if it take place between Jews.

Thus we have explained everything where a doubt can occur.

#### REVIEWS AND NEW BOOKS

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### General Works, Theory and Its History

Introduction to the Study of Sociology. By Edward Cary Hayes. (New York: D. Appleton and Company. 1915. Pp. xviii, 718. \$2.50.)

This is "an elementary textbook" designed to give a summary of "accepted results" for the general reader and an outline of the whole subject for the college student. The volume is consequently not only encyclopedic in scope but includes both theoretical principles and practical problems. The treatment, however, is solid and purposeful throughout and, while necessarily sketchy in many places, has few paragraphs that are thrown in merely to complete an outline. As compared with the Blackmar and Gillen text this volume is much more systematically constructed; there is a well-sustained and consistent analytical treatment throughout. Moreover, the language is clear and the author's meaning is made plain. One may welcome also the rather general absence of platitudinous disquisitions of a religious flavor. The tone throughout is marked by scientific earnestness and a sincere effort to give sociology the dignity of a systematized body of inquiry.

The introduction is a most excellent statement of the nature of sociological study in which the high purpose of social betterment by means of social control based on knowledge and the significance of the principle of causation in social life are set forth. These two features—intense desire for improvement in the lot of mankind and a thoroughgoing insistence upon scientific rigor regarding causal relations—are characteristic of the treatment throughout.

The work is divided into four unequal parts: "The causes which affect the life of society," "Nature and analysis of the life of society," "Social evolution," and "Social control." As the author intimates, there may be some question as to the desirability of this order. Probably all would agree that a treatment of social control should come last, but there would seem to the reviewer to be sound pedagogical reasons for placing part III, on social evolution, at the beginning to familiarize the student with the field and its problems and prepare for analytical

studies to follow. This could very properly be followed by part II and this in turn by part I, thus exactly reversing the order of the text. In its present position part III seems thrust into the study of sociological principles.

In part I the causes are divided into four groups: geographic: technic, including rural and urban conditions, personal groups and crowds, and wealth; psychophysical; and social. This part comprises over 300 pages. Most teachers of sociology will quarrel not merely with the proportion of the book devoted to this division but with the distribution of space within it. Thus, the treatment of the distribution of wealth, including poverty and charity organization, covers 125 pages. This extended treatment, with attempts to solve numerous specific problems, such as housing, city planning, relations of labor and capital, workman's compensation, unearned increment tax, minimum wages, collective bargaining, profit sharing and cooperation, socialism, etc., however excellent, necessarily gives an appearance of superficiality and verbosity. Most of these matters may more properly be treated in such detail in courses devoted to social economics leaving to sociology a more broadly generalized study of the factors in social life. The author's presentation here as in other parts noted below confuses by excessive diffusiveness. would have expected also that the thorough and systematic treatment of geographic factors would have been followed by a study of the general role of economic conditions in social life and evolution rather than a detailed study of present problems in wealth distribution.

One of the most unique features of the volume is that portion of the first part devoted to psychophysical causes. Here under "hereditary traits" are included a long list of predispositions. These embrace instincts such as mating and less definite tendencies such as "the enterprising predisposition" or the "acquisitive predisposition." In other words, the principal part of the social psychology (a term not used) of the volume is included in this chapter. Thus a section on "general neural traits" describes "keenness of the five senses, and pain," "type of mental imagery," "esthetic sensibility," "retentiveness of memory," "degree of mental organization," "type of motor response." The treatment throughout this section is not to be criticised so much from overemphasis of the hypothesis that all such traits are primarily hereditary in character as from the lack of sufficient sociological setting

and application. The significance of traits in relation to social evolution or organization is sacrificed for an outline of traits that would furnish a basis for many interesting statistical studies in the psychology of individual differences. To some extent this same characteristic is found in the immediately following chapters. One can hardly say that the author skims the surface, for he presents his material with scientific precision; but there is an encyclopedic universality of topics presented with an insufficiently generalized setting. With no mention of Malthusianism or natural selection and with only briefest mention of the methods of variation and heredity, one will fail, from the text alone, to acquire a sufficiently clear-cut grasp of the reproductive instinct as a sociological factor. Would it not be an improvement both pedagogically and scientifically to set forth the distinctly biological causes by themselves and the psychological and the socialpsychological by themselves? The extent to which heredity is a factor in the latter must remain an open question for the present in any case. The term "psychophysical" is good, but it is scarcely a proper term under which to treat all the elements here included without some classification of them according to the preponderance of biological or psychological factors in them.

The second part is well carried out. It contains an original conception in the treatment of the characteristics of social activity as "prevalence," "social causation," and "manifestation"; and of the characteristics of society as "similarity of activities," "mutual causation," and "intercommunication." This latter term would bear more analysis, for it seems to replace both suggestion

and imitation as well as simple communication.

Many teachers will note certain large omissions from the chapters on social evolution. The origin of man is a favorite topic with many. A systematic outline of tribal society would have had a proper place here. Moreover, it is difficult to understand why the author should have substituted his remotely theoretical treatment of the origin of the state for the historical steps as worked cut by Gumplowicz, Ward, Giddings, and others. Then there is no study of the present tendencies toward collectivism and the large issues of individualism versus socialism as social systems. It would seem that the book as a whole might be greatly improved by a considerable reduction in the space devoted to problems of wealth distribution in the first part and an expansion of this third part. This would give it greater

solidity as a treatment of sociology and less the aspect of a discussion of problems of social justice.

F. H. HANKINS.

Clark University.

### Economic History and Geography

English and American Tool Builders. By Joseph Wickham Roe. (New Haven: Yale University Press. 1916. Pp. xv, 315. \$3.00.)

This book is an admirable study of a topic which deserves the careful attention of historians and economists, but which, probably on account of its technical aspects, has been generally neglected. The author writes the history of machine tools for metal working from the time of Wilkinson, Bramah, and Maudslay down to the present day, casting his book in the form of biographical narrative, and following from one person to another the course of the mechanical inventions which have revolutionized the processes of machine manufacture. He describes the origin of the engine lathe, planer, and miller, and traces the development from them of specialized forms for the varied uses of modern tool building; he sketches the history of standards and methods of measurement, of screw cutting and of gear cutting; and includes an interesting study of the history of the manufacture of interchangeable parts.

No previous book has essayed to cover this broad field. present author has had substantial printed material on which to draw, for his account of the early period; but for the later history of the subject he has had to depend largely on the information gained by personal interviews and private correspondence, and makes in this part of his work an original contribution of the greatest value. The "genealogical tables," by which he shows the course of descent of improved shop methods from certain centers, such as the works of Eli Whitney and of Robbins and Lawrence, serve to clear up the maze of private enterprises composing the American machine industry, and, like some other parts of his work, are to be prized as highly for the questions that they raise as for the questions that they answer. Here, at the very core of the phenomena that "materialist interpretation" has claimed as its own, personality and idea appear to hold full sway.

Professor Roe, himself an adept in machinery, assumes that his reader knows the difference between a miller and a shaper, between an involute and a cycloidal gear, without the need of being told; and does not make any appreciable concession to the ignorance of most people in matters of mechanical technique. If this restricts the currency among economists of so excellent a book it will be unfortunate.

CLIVE DAY.

Yale University.

NEW BOOKS

Anderson, D. R. William Branch Giles: A study in the politics of Virginia and the nation from 1790 to 1830. (Menasha, Wis.: George Banta Pub. Co. 1915. Pp. 271.)

Giles had an unusually long public career-nearly forty yearsas member of the Virginia legislature, representative and senator from Virginia in the Congress of the United States, and finally governor of Virginia, but has waited until the present for a biographer. He has, however, secured a sympathetic one in Professor Anderson, who has devoted much time and effort to gather the scattered material necessary for such a work. As Giles was primarily a politician, with little or no understanding of economic or financial problems, there is little in his career to interest the student of economics, except as his position on various public questions of his time reflected the attitude of his constituency. Representing an agricultural district he opposed all Hamilton's financial plans, such as assumption, the establishment of a central bank, etc. He also opposed the financial policy of Gallatin, though this time for political reasons. Acting as a supporter of Jefferson, he defended the embargo. He opposed a protective tariff, the money power in all its many manifestations, and the usurpation of power by the central government. Always a man of strong feelings, violent and unrestrained in debate, and with shifting interests and convictions, his life offers an interesting study in psychology as well as politics. For the student of economic history the outstanding fact in this study is the marked effect of early environment and influences upon the political convictions of a man who considered himself extremely independent. The author has made a careful and scholarly study, but has not always been able to escape a certain bias in favor of his subject.

E. L. B.

BABBS, A. V. Law of the tithe as set forth in the Old Testament. (New York: Revell. 1915. Pp. 254. \$1.)

BOGART, E. L. Readings in the economic history of the United States.
(New York: Longmans. 1916. Pp. xxviii, 862. \$2.80.)
To be reviewed.

Bose, S. Some aspects of British rule in India. (Iowa City: State University of Iowa. 1916. Pp. 149.)

BOUCHIER, E. S. Syria as a Roman province. (New York: Longmans, 1916. Pp. 304. \$2.)

Buffington, A. H. New England and the western fur trade, 1629-1675. Reprinted from the Publications of the Colonial Society of Massachusetts, vol. XVIII. (Cambridge: John Wilson and Son, 1916. Pp. 192.)

This is an interesting and scholarly account of the efforts of the people of New England and especially of Massachusetts to secure direct access to the valuable fur trade which formed the basis of the Dutch settlements along the Hudson and of the French in Canada. The fur trade was early developed in New England, but with the settlement of that section soon lost local importance, and efforts were made to follow it further west. For this New England was disadvantageously situated, as overland connection was not feasible, and all the water routes were held by rival nations. Conflict with the French resulted in 1628 when a company was formed to get possession of the St. Lawrence; with the Dutch in 1640-1654 through attempts to get control of the fur trade on the Connecticut and the Delaware, and on the Hudson between 1645 and 1675. In every case the endeavor of New England to obtain access to the western fur trade was frustrated.

In these efforts the author sees an influential factor leading to various attempts at colonial union. "The only thing, down to the outbreak of the struggle with Great Britain, which could induce the several colonies to lay aside their jealousies even temporarily was the occasional necessity for union against their Indian and foreign enemies." But such union was essential if they were to secure their share of the fur trade, and this note runs through the political and diplomatic history of the early colonial period. Indeed the author probably does not greatly exaggerate when he declares "the history of North American expansion might almost be written in terms of the fur trade."

E. L. B.

Burgess, J. W. The administration of President Hayes. (New York: Scribner. 1916. Pp. xii, 154. \$1.)

The little volume bearing the above title is the Larwill lectures, delivered in 1915 by Professor Burgess at Kenyon College, the alma mater of President Hayes. It is a sincere appreciation of the character and administration of its subject, which the author thinks have not been sufficiently esteemed by his countrymen and the world. Of particular interest is the praise accorded Hayes' financial policy, which covered the subjects of resumption of specie payments, free coinage of silver, and refunding of the debt. He supported and carried through resumption and refunding, but was unalterably opposed to free coinage and even to the silver purchase act approved of by Allison and Sherman. His financial policy

Professor Burgess thinks was marked by courage, farsightedness, and devotion to principle. Of Hayes' discussion of the monetary question in his first annual message, of December, 1877, the author says it "has never been surpassed, if equalled, for correctness, conciseness, and exhaustiveness anywhere in our economic literature."

E. L. B.

CADOUX, G. La prospérité économique de l'Allemagne, sa "place au soleil" et la guerre. (Paris: Berger-Levrault. 1916.)

Dahlinger, C. W. Pittsburgh: a sketch of its early social life. (New York: Putnam. 1916. Pp. 216. \$1.25.)

GILL, C. National power and prosperity. (London: Unwin. 1916. 4s. 6d.)

HAYNES, F. E. Third party movements since the Civil War. With special reference to Iowa. A study in social politics. (Iowa City: State Historical Society of Iowa. Pp. x, 564. \$2.50.)

Hebble, C. K. and Goodwin, F. P., editors. The citizens book. (Cincinnati: Chamber of Commerce. Pp. 242. \$1.25.)

Howe, F. C. Why war? (New York: Scribner. 1916. Pp. xvi, 366.)

HUNTINGTON, E. Civilization and climate. (New Haven: Yale Univ. Press. 1915. Pp. xii, 333. \$2.50.)

Lefeuvre-Méaulle, H. La Grèce économique et financière en 1915. (Paris: Alcan. 1916. 3.50 fr.)

von Mayr, G. Volkswirtschaft, Weltwirtschaft, Kriegswirtschaft. (Berlin: Rothschild. 1915. Pp. 64. 1.50 M.)

MILLIOUD, M. The ruling caste and frenzied trade in Germany. (Boston: Houghton Mifflin, 1916. Pp. 159. \$1.25.)

RAPPARD, W. E. Notre grande république soeur. Aperçu sur l'evolution des Etats-Unis et sur les rapports Suisses-Americains, conférence faite a l'Aula de l'Université de Berne. (Geneva: S. A. Sonor. 1916. Pp. 51. 1 fr.)

In this address by a professor in the University of Geneva who was at one time assistant professor at Harvard, the intimate relations of the sister republics, Switzerland and the United States, are sketched with skill and sympathy. Americans will join cordially with the author in the hope that on the basis of common interest which he demonstrates a system of academic exchanges between the two countries may be established.

C. D.

Rose, J. H. Nationality in modern history. (New York: Macmillan. 1916. Pp. xi, 202. \$1.25.)

Sellars, R. W. The next step in democracy. (New York: Macmillan. 1916. Pp. v. 275. \$1.50.)

STREIGHTOFF, F. D. and F. H. Indiana; A social and economic survey. With a chapter on Charities and corrections by C. C. North. (Indianapolis: W. K. Stewart Company. 1916. Pp. 261.

\$1.25.)

Indiana is to celebrate this year the one-hundredth anniversary of her admission into the Union, and consequently a very general interest has been aroused in the history and activities of the state. The history of Indiana is being written by a small band of scholars at Indiana University, headed by Professor Woodburn. Professor and Mrs. Streightoff have therefore confined themselves in this volume to "a concise description of Indiana as she is, and of the problems she faces." The title is somewhat misleading, for about half the book deals with economic problems and the other half describes the government and administrative features. Like most books that are inspired by commercial opportunity rather than by a complete mastery of the subject, this study leaves much to be desired.

The chapters are concise and there is much that is suggestive in the comments, but one feels that the authors have drawn upon their knowledge of economic phenomena in general where specific information on Indiana was lacking. There are many omissions of matters that might fairly have been looked for; for instance there is nothing on population and immigration, on marketing, on banking, or on cultural development. The first three chapters, on natural resources, on trees, and on agriculture, are the best, perhaps because on these subjects information is most easily available. No mention is made, however, of tenancy in the last-named chapter. In the discussion of transportation, roads and interurban lines are described at considerable length, but less than half a page is given to railroads as they exist in the state today. The chapters on manufactures and labor are particularly unsatisfactory, being scrappy and undigested. On page 64 the word concentration is misused, specialization being obviously intended. While the severe characterization of the tax system of Indiana is possibly justified, due credit is scarcely given to the good administration of a bad system.

In spite of its shortcomings the book is interesting, well written, not over-burdened with detail, and will doubtless serve the purpose for which it was prepared, of informing the people of Indiana about some of the economic and political problems of their state.

E. L. BOGART.

Webster, H. Rest days. A study in early law and morality. (New York: Macmillan. 1916. Pp. xiv, 325. \$3.)

To be reviewed.

Webster, L. J. The operation of the freedmen's bureau in South Carolina. Smith College studies in history, vol. I, no. 2. (Northampton, Mass.: Smith College Dept. Hist. 1916. Pp. iv, 118. 50c.) 1916]

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This is the first installment of a careful study of the working of an institution which, however political its conception and purpose, dealt perforce mainly with economic problems. Chapter 1 describes the experiment of the federal government in colonizing the freedmen on the sea islands of North Carolina during the years 1862-1865. The result of this experiment enabled the government to draw up a workable freedman's bureau bill when the system was extended to all the insurrectionary states in 1865. In the second chapter is described the organization and administration of the bureau, and in the two following chapters the distribution of the land, and problems connected with labor, justice, and marriage relations. The handling of the land question was particularly inept, the negroes being promised land three times, only to have it taken from them, while the dispossessed planters were often unjustly treated. The labor problem was settled by forcing the negroes and planters to make wage contracts, but these were often broken and difficult to enforce. In the settlement of the confused marriage relationships of the freedmen the author concludes that the bureau's work was beneficial. The study is carried to the end of 1865 in this number.

E. L. B.

WICKWARE, F. G., editor. The American year book, a record of events and progress. 1915 edition. (New York: Appleton. 1916. Pp. xviii, 862. \$3.)

The Argentine yearbook, 1915-1916. With short chapters on the republics of Uruguay, Paraguay, and Chile. (New York: Donnell and Palmer. 1916. \$5.25.)

China. (New York: Guaranty Trust Co. 1916. Pp. 62.)

Louisiana, her financial needs; an analysis of existing conditions, with practical remedial suggestions. (New Orleans: Bankers Loan & Securities Co. 1916. Pp. 31.)

Russia. (New York: Guaranty Trust Co. 1916. Pp. 53.)

### Agriculture, Mining, Forestry, and Fisheries

Irrigation in the United States. A Discussion of its Legal, Economic, and Financial Aspects. By RAY PALMER TEELE. (New York: D. Appleton and Company. 1915. Pp. viii, 252. \$1.50.)

The public has been slowly awakening to the importance of the conservation and use of the natural resources of the country. Among these, the most fundamental is land. Anything which will reduce the enormous area of wasted land and which will correspondingly increase the extent to which it can be put to beneficial use must be of value not merely to the occupants of the land but to the entire community, the effects reaching out to the state and to the nation.

The United States includes within its borders vast tracts of arid land. Nearly two fifths of the entire surface has relatively little, if any, use because of lack of moisture. It is difficult to grasp this significant fact and to appreciate that the geographical extent of several of our western states exceeds that of the warring monarchies of Europe or that their millions of population could make a living within the area of these sparsely settled states were it not for a single deficiency—the lack of the most common of minerals, namely, water—a deficiency which in part may be remedied by irrigation.

The little book by Mr. Teele discusses the problems of irrigation in the United States in their legal, economic, and financial aspects. The engineering side has been discussed quite fully in various publications, but this book is perhaps the most complete and simple presentation of the factors which make possible the work of the irrigation engineer. There is probably nothing at present available which enables a business man or general student to obtain a better grasp of the subject than does this work. Beginning with a general statement regarding irrigation and its importance, the development of agriculture by artificial application of water is shown and the reasons for its limitations are pointed out in a discussion of the climatic conditions and water supply. The value of crops is also considered and it is shown that by far the greater part of the irrigated lands is devoted to what are commonly called general farm crops. Nearly two thirds of the total acreage is devoted to hay, principally alfalfa; the average value for all crops raised by irrigation is a little over \$25 per acre.

Irrigation, as every other good thing in a new country, has been greatly exploited. As an offset to the exaggerated statements which have prevailed, Mr. Teele points out "that the large yields and the high crop values so much exploited are not the rule but the exception. The truth is that the larger part of irrigated land, like the larger part of all farm land, is devoted to the general crops which bring moderate returns." It is important to emphasize this matter in order to better understand the reason why at present stagnation largely prevails in irrigation development.

In discussing the legislation pertaining to irrigation the fact

is brought out that the laws have not been kept up with the needs of the people, also that there is great confusion as between the various states, and much popular misconception as to the laws themselves, resulting in almost endless controversy. In certain localities more money has been spent in litigation than in irrigation.

This condition of perennial litigation, combined with moderate average returns from the irrigated lands, has been unfortunate for irrigation investment. Most of the investors, especially those living in the eastern part of the United States or in Europe, are in the position of "involuntary philanthropists" in that their money has been used to develop certain areas, with correspondingly great benefit to the locality, but with almost complete loss to the investors. The state authorities, which, in popular opinion at least, have the duty of supervising some of these projects, have not always had the experience or opportunity for properly discharging their duties. While many individuals have invested money under the assumption that approval had been given by the Secretary of the Interior or by state boards of irrigation, as a matter of fact such approval has been simply to the title of the land or to the form of contract, not in the nature of a guarantee either by the federal government or the state. Methods of organization and operation of irrigation enterprises are discussed as well as the present situation and future of irrigation in the United States.

It is shown that, while in the past there have been successive waves of enthusiasm and depression, there is now a gradual expansion of irrigation, resulting mainly from individual or small community effort. This is accompanied by a gradual enlargement of the acreage of irrigated land made possible by more economical use of the water. Larger projects now quiescent may be taken up in the future by some kind of cooperation between the public and private agencies such as may involve public supervision and public contribution not to be repaid immediately. It is apparent that for the immediate future at least there will not be a repetition of the reckless investments of former years. Private capital can no longer be attracted to this work on a speculative basis, but the large storage reservoirs and other great structures needed for the development of the arid regions must be built by some form of public enterprise, one which is not essentially money making in character.

The book as a whole is quite readable and will answer the questions of many thousands of investors in the East who can not understand why they have not been able to obtain anything from the money spent in good faith in irrigation works. It also has interest to those living upon or near irrigated farms and who are deriving an income which is more or less dependent upon the success of irrigation.

F. H. NEWELL.

#### NEW BOOKS

BIDWELL, P. W. Rural economy in New England at the beginning of the nineteenth century. (New Haven: Connecticut Academy of Arts and Sciences. 1916. Pp. 158.)

To be reviewed.

MILLAR, A. Wheat and its products. (London: Pitman. 1916. Pp. 148. 2s.)

Sanford, A. H. The story of agriculture in the United States. (Boston: Heath. 1916. Pp. 394. \$1.)

Wiles, R. Cuban cane sugar—a sketch of the industry from soil to sack. (Indianapolis: Bobbs-Merrill. 1916. Pp. 85. 75c.)

Cotton year book and diary, 1916. (Manchester: Marsden & Co. 1916. Pp. 659. 2s. 6d.)

International year book of agricultural statistics. (Rome: Intern. Inst. Agri. 1916.)

Monographs on agricultural coöperation in various countries. (Rome: Intern. Inst. Agri. 1916.)

Yearbook of the Department of Agriculture, 1915. (Washington: Dept. Agri. 1916. 75c.)

## Manufacturing Industries

Textiles. Prepared in the Extension Division of the University of Wisconsin by Paul N. Nystrom. Commercial Education Series. (New York: D. Appleton and Company. 1916. Pp. xviii, 335. \$1.50.)

The purpose of this book is to present in concise form the essential facts regarding the production, manufacture, and distribution of the ordinary textiles of commerce, in such shape as to be of value to retail and wholesale salespeople and to the general public who may wish to obtain an insight into the great textile industry. To treat a technical subject in such way that it may be clearly understood by non-technical readers is a difficult

accomplishment, but the author has succeeded far better than most and has produced the best popular treatise yet published on this subject.

The book contains 71 pages on the production, marketing, manufacture and distribution of cotton, 8 pages on the linen industry, 59 pages on wool, 5 pages on mohair, and 49 pages on silk, waste silk, and imitations of silk. In addition there are introductory chapters on the textile fibers in general, a historical sketch of textiles and mechanical devices for preparation of textiles, and closing chapters on cloth designing, dyeing and printing, cloth finishing, the care of textiles, and textile tests. There are 31 illustrations, including several photographs of various weaves with their point paper designs.

As a treatise on textiles the most marked defect of the book is the omission of any but the most casual reference to the great jute industry; it is dismissed with fewer lines than the relatively insignificant ramie industry. There are more pounds of jute manufactured than of any fibre with the single exception of cotton. The omission may be due to the fact that jute is mainly used for wrapping and baling and enters only slightly into the clothing requirements of the world.

In some instances, the author has confused English and American systems. He states that "scutchers" are an additional series of machines sometimes used in picker rooms, whereas this is the term used by the English to cover the machines that Americans call pickers and lappers, previously described by the author. He states that spinning and weaving in the same mill is the exception in the United States. In reality it is an exception to the rule in England, but in the United States the majority of the weave mills spin their own yarn.

On page 75 it is stated that practically all the India cotton is exported to England. As a matter of fact, Japan takes about half of the total exports of India cotton; and Germany, Belgium, Italy, Austria-Hungary, and France each use more than England, which, on account of its production being mainly confined to medium and fine yarns, has use for but an insignificant portion of this inferior fiber. Again, the author states that the cotton worker's standard of living in the United States is gradually becoming lower, approaching the standard of living of the people in the same occupation in other countries. But the truth is that wages are yearly increasing in this industry

all over the world: the standard of living of the American operatives is becoming higher; and the standard of living of operatives in other countries, though still much behind the American, is steadily improving. In some cases the author has not kept up with the recent publications. For instance, his statements as to the wages paid cotton pickers and the number of spindles tended per spinner are those of years ago; also, for a technical reader, his description of some of the machine processes seems to be slurred over with too general a statement.

It is easy to pick out points in which the author has not been entirely accurate, but most of them are not material enough to affect the value of the work. Taken altogether the book is carefully written, and it merits wide use by schools and by those desiring to gain a good knowledge of the textile industry without having to wade through too many technical details. Though written primarily for popular consumption, the volume could be used for ready reference by those who have technical training.

W. A. GRAHAM CLARK.

#### NEW BOOKS

- Shaw, F. L. The building trades. (Cleveland, O.: Survey Committee of Cleveland Foundation. 1916. Pp. 107. 25c.)
- Shaw, F. L. The printing trades. (Cleveland, O.: Survey Committee of Cleveland Foundation. 1916. Pp. 95. 25c.)
- Wiest, E. The butter industry in the United States. An economic study of butter and oleomargarine. Columbia University studies in history, economics and public law, vol. LXIX, no. 2. (New York: Longmans. 1916. Pp. 264. \$2.) To be reviewed.
- Proceedings of the twentieth annual meeting of the American Foundrymen's Association, Atlantic City, Sept. 27 to Oct. 1, 1915. (Cleveland, O.: A. O. Backert, secretary. 1916. Pp. x, 672. \$5.)
- Shirt and collar industries. (Washington: Bureau of Foreign & Domestic Commerce. 1916. Pp. 178. 20c.)

# Transportation and Communication

- The Commodities' Clause. A Treatise on the Development and Enactment of the Commodities' Clause and its Construction when Applied to Inter-State Railroads Engaged in the Coal Industry. By THOMAS LATIMER KIBLER. (Washington: John Byrne and Company. 1916. Pp. 178. \$3.00.)
  - The first chapter of this book deals with the status of railway

and coal mining relationships in Europe. From this study it appears that the commodities clause of the Hepburn bill (1906) was passed to meet a problem peculiar to the United States; there is not now, and with one exception there never has been, any affiliation between the railways and the coal mines in Europe. The second chapter describes in some detail the status of railway and coal mining relationships in the United States. It appears that in the bituminous coal fields the railroads rather effectively dominate the situation, while in the anthracite region, as is well known, the railways have attained a monopolistic position which is almost without parallel. The third chapter outlines the legislative history of the commodities clause; and the fourth analyzes the court decisions interpreting and emasculating this clause.

The fifth chapter suggests the legislative solution of the problem inherent in railroad control of coal mining operations. The author approves of the principle of the commodities clause; and he has drafted a bill which he believes will restore the teeth to this clause. However, in case it appears that the dissociation of the railroad and coal properties can not be effectively brought about, the coal properties should, in his opinion, be condemned and taken over by the government. Where the coal lands are already publicly owned, the ideal plan is held to be the leasing of these lands to private parties, with provision in the lease for the elimination of waste in coal mining, and for the maintenance of reasonable prices and satisfactory conditions of employment.

This book evidences accuracy, thorough research, and painstaking labor in the gathering of material from the sources. It is not, however, without its faults. Distinctly less care has been shown in the utilization of the material collected than in its collection. From the account of the Delaware and Hudson Company (p. 38) one would infer that this company entered the coal business in 1869; in fact, it entered it in the twenties. In the account of the anthracite relationships (pp. 36 ff.) no mention is made of the New York, Ontario, and Western Railway. One learns only incidentally, from a remark thrown in while discussing the bituminous coal railroads, that the Pennsylvania Railroad was a factor in the anthracite situation, and nowhere is there given a true idea of the importance of this railroad as an anthracite carrier. In tracing the course of the commodities clause through Congress numerous dates are cited,

but the author neglects to give the date of the original passage of the clause by the Senate and by the House, as well as the date of the final passage of the bill after it emerged from conference. Finally, in a chapter on the legislative history of the commodities clause as much space is given to a proposed resolution to investigate the coal situation as to the commodities clause itself.

ELIOT JONES.

University of Texas.

Railroad Valuation and Rates. By MARK WYMOND. (Chicago: Wymond and Clark. 1916. Pp. 344. \$1.50.)

This book is the work of an engineer familiar with the promotion, engineering, construction, and operation of railroads, as well as with the preparation of rate schedules. It contains facts and figures designed to show that the fair value of railroad property is greater than can be obtained by the methods of valuation employed in the past, and that the rate of return should be made higher than is usual at the present time. Furthermore, arguments are presented in an attempt to prove that cost of service can enter only to a limited extent as a factor in the preparation of railroad rate schedules.

The book is of special interest at the present time for the reason that most of the questions therein discussed are still in controversy before the Interstate Commerce Commission. Such an honest and clear statement of facts should do much to convince the partisans for the public of the injustice of many of their contentions. The success of the railroads of the country is essential to the prosperity of the public and the nation as a whole, and the future welfare of the country is better assured by a full acceptance of such evidence as Mr. Wymond presents than by the adoption of many of the radical doctrines at present held by those who consider that, by restricting the value of railroad property, by establishing a lower rate of return, and by the preparation of rate schedules based on actual cost of service, they are safeguarding the interests of the public against what they contend are the extortionate demands of the railroads.

Mr. Wymond's work is not a brief for the railroads. It is rather a recapitulation of all of the expenses which the railroads have incurred in creating their properties and of the various factors which must be considered in the preparation of rate schedules. There is nothing of the nature of a legal argument in it, if we except a few quotations from court decisions to support certain contentions. It is a simple, sincere, and direct statement of facts by a man of wide railroad experience, who appears to be convinced of the justice of the claims of the railroads for larger returns and for rates based on value of service and only indirectly on its cost.

On the other hand, when the great present interest in this subject is considered, it is a question whether some recognition could not well have been made by Mr. Wymond of the obligations of the railroads to the public. It is impossible for the public at large or for its representatives on railroad and public service commissions to accept many of Mr. Wymond's contentions, such as that the railroads of the country are not subject to rate regulation except in so far as unjust and discriminating rates are concerned; that the interest of the public in a railroad is no different from its interest in many private enterprises; that a railroad is not a monopoly but in many cases has "good will," the value of which should be made a portion of the value upon which fair rates can be based; that abandoned permanent construction should be now included as a portion of the present value of the property, together with property owned by the company but not yet useful; and that if maintenance is normal there can be no depreciation of railroad property as a whole. These and many similar contentions seem to disregard the interests of the public to such an extent that it is to be regretted that Mr. Wymond does not find any basis for the claim of the public that, in view of the rights given to the railroads, the government should be entitled to see that the charges for service as a whole are not unreasonably high.

Apart from these partisan views, Mr. Wymond's book contains much that is of definite value to those interested in appraisals of public utility property. Especially to be commended are the earlier chapters dealing with preliminary costs, such as "promotion," preliminary engineering, and financing. Expenses of this character have been large in the experience of most railroads and would be large if the railroads were to be reproduced today. Proper recognition of these expenses and sufficient allowance for them have rarely been made in past valuations.

HAMMOND V. HAYES.

Transportation Rates and Their Regulation. By Habry Gunnison Brown. (New York: The Macmillan Company. 1916. Pp. xii, 347. \$1.50.)

Writing from the standpoint of the professional economist, Professor Brown has endeavored to present a complete theory of transportation rates in their relation to commerce. Especial reference has been made throughout to the railroads of the United States, while the aim has been, further, "to illustrate this theory with a sufficient number of concrete cases arising in actual regulation to make the reader or student feel that the presentation is thoroughly practical." For the most part, the ground traversed in this book has been so often covered by other writers as to admit of little opportunity for originality in either subject matter or treatment. It is the opinion of the reviewer, however, that in the broad-minded analysis of rate discrimination, in the refreshing clearness with which the salient principles of rate making and of rate regulation are set forth, and in the more even distribution of emphasis as between the "inner philosophy of rate regulation" and the "mere record of past legislation and description of existing law," the author has produced a work which has much to commend it.

Opening with a classification of the costs of transportation and a discussion of the proper relation between rates and each class of costs, Professor Brown passes, in the second chapter, to a consideration of the competition of transportation companies. This chapter, first published in practically its original form as an article in the American Economic Review for December, 1914, treats the topic in a suggestive way, in that the traditional topic of competition of and for markets is discarded for so-called competition of directions and competition of locations, and a further subdivision, entitled "competition against potential local self-sufficiency," is added.

Next follows a description of monopoly conditions and the effect of monopolistic rates on commerce. Attention is then directed to a careful study, in several chapters, of the various kinds of discrimination. The questions most considered are "whether a given level of rates is so high that, like tariff restrictions, it will prevent commerce which ought to take place, or whether it is so low (less than cost) that, like most bounties, it will encourage commerce that ought not to take place, or

whether rates are discriminatory in such a way as to effect commerce injuriously."

In the closing chapters a convenient survey of the development of rate regulation in the United States and of the more important rulings and theories of the Interstate Commerce Commission is given, concluding with a statement of principles regarding the propriety of government interference with transportation.

With the outstanding idea that the fixing of transportation rates is a matter to be entered upon primarily with regard to its probable effect upon the economic welfare of the community, few will be inclined to disagree. The broader aspects of the railway problem, unfortunately not always assigned their true importance by writers in this field, have been kept well to the fore. Much stronger dissent, on the other hand, will undoubtedly be raised to the general free-trade argument that runs through the whole volume, and to a theory of rate making which rests so fundamentally, and yet, in the opinion of the reviewer, with entire justice, upon the cost-of-service principle.

As a supplement to the standard works of Professors Johnson and Ripley, this book will undoubtedly meet with favor among those college instructors who are desirous of introducing their students to a more extended study of "the reasons of public policy which sometimes do, and which always should, lie back of" transportation legislation.

MAXWELL FERGUSON.

Vassar College.

### NEW BOOKS

- Ferguson, M. State regulation of railroads in the South. Columbia University studies in history, economics and public law, vol. LXVII, no. 2. (New York: Longmans. 1916. Pp. 221. \$1.75.)
- Gartner, K. K. Gartner's notes to the interstate commerce commission reports, covering volumes 31 to 34 inclusive, and unreported cases complete. Supplement, 1916 A. (Louisville, Ky.: Baldwin Law Bk. Co. 1916. Pp. 214. \$5.)
- Ketchum, E. S. Application of tariffs within and from the official and Canadian classification territories, pts. 1 and 2. Industrial traffic departments, organizations, management system and records. The traffic library, vols. 3, 4, 5. (Chicago: Am. Commerce Assoc. 1916.)
- Kirkaldy, A. W. British shipping. Its history, organisation and importance. (New York: Dutton. 1914. Pp. ix, 655. \$2.)

This book contains material useful to the economist. Among the 24 appendixes are some very convenient curves and tables giving facts about ocean freight rates and their fluctuations, shipping profits, ship building, British trade, canal traffic, coal prices, etc. Scattered through the book, often in places where one would little expect to find them, are pieces of significant usable knowledge like the following: "It has been demonstrated that a steamer of 10,400 tons capacity only costs 20 per cent. more to run than a steamer having a capacity of but 5900 tons." The preparation of the book shows much work and knowledge, and I have no temptation to challenge the accuracy of its statements. But in plan and method it leaves much to be desired.

To start with, it covers the earth; witness its title and contents; "British Shipping, Its History, Organisation and Importance." Under this title comes:

Book I, The Evolution of the Ship (pp. 150). This is not particularly British. It might have been German or Scandinavian. Book II, Ownership, Management and Regulation of Shipping (pp. 135). This is not particularly British either.

Book III, Trade Routes (pp. 184). Of this, 65 pages purport to be about the Panama Canal.

Book IV, Some of the Ports and Docks of the United Kingdom (pp. 100). This is really four widely separated subjects none of which seems to bear very closely to the main title of the book.

The author, by his work, emphasizes that British characteristic so painfully brought to the fore by the Great War, lack of organization. For example, he devotes three pages to rehearsing the well-known facts about the mosquito, malaria, and yellow fever. This comprises three eighths of the chapter on the Panama canal. His philosophy is equally unorganized. He seems to have no concept of organization of traffic. Facts seem to stand by themselves in the book. Yet there are many good facts.

There is an almost complete absence of page references, and the insularity of preparation is shown by the absence from the rather long bibliography of any mention of two American books produced under the auspices of the Carnegie Institution, now several years old and bearing a very close relation to some of the fields of his labors.

J. RUSSELL SMITH.

Mundy, F. M. The earning power of railroads, 1916. (New York: J. H. Oliphant & Co., 60 Broadway. 1916. Pp. 514. \$2,50.)

The two-year period 1914-1915 is covered in this edition. Statistics for many railroads in the United States, Canada, Cuba, and South American countries are included. Notes give information as to dividends, capitalization, investments, physical and financial conditions, etc.

Rogers, L. The postal power of Congress. A study in constitutional expansion. Johns Hopkins University studies in historical and political science, series XXXIV, no. 2. (Baltimore: Johns Hopkins Press. 1916. Pp. 189.)

# Trade, Commerce, and Commercial Crises

History of Domestic and Foreign Commerce of the United States. By Emory R. Johnson, T. W. Van Metre, G. G. Huebner, and D. S. Hanchett. With an introductory note by Henry W. Farnam. Two volumes. (Washington, D. C.: The Carnegie Institution. 1915. Pp. xv, 363; ix, 398. Paper, \$6; cloth, \$7.)

American economists will regard with particular interest this work, the first published of the divisional summaries of the Contributions to American Economic History, from the Department of Economics and Sociology of the Carnegie Institution. project of this cooperative economic history was adopted by the institution in 1903. In the years intervening the department has given earnest of its activity by the publication of the monumental Documentary History and Index of Economic Material, and by assistance in the preparation of many special studies, designed to serve as material for the elaboration of the editors, and of which many have already appeared as monographs. To some, doubtless, the time required for the publication of results has seemed exorbitant. To those who have worked in the field and appreciate its difficulties slow progress has seemed inevitable. At any rate, the two volumes which now appear under Professor Johnson's leadership will still any complaints as to his part of the work. They are well worth waiting for.

Each volume is divided into three parts, and the contents, with an indication of the authorship, are as follows: American commerce to 1789, E. R. Johnson; Internal commerce, T. W. Van Metre; The coastwise trade, T. W. Van Metre; Foreign trade since 1789, G. G. Huebner; The fisheries, T. W. Van Metre; Government aid and commercial policy, D. S. Hanchett. The plan of collaboration was actually more complicated than appears in this summary. Professor Johnson directed the whole investigation and stimulated the preparation of a number of monographs, of which some, by McFarland, Tower, Giesecke, C. L. Jones, and J. R. Smith, have already come out independently, while others, by S. S. and G. G. Huebner on the history of

the foreign trade of the United States, by T. Conway, Jr., on coastwise commerce, by W. S. Tower on fisheries outside New England, are still unpublished. Professor Johnson, further, exchanged with his collaborators in the preparation of special chapters, and edited the whole work so effectively that its composite character is nowhere unpleasantly apparent. His success is due in part, perhaps, to the fact that he chose his assistants from colleagues at the University of Pennsylvania, with whom he was in regular and intimate relations.

The subject of the first part of the work, the commerce of the colonial period, is that which has already received the most careful attention from scholars, and which therefore offers the least scope for the contribution of new views or material. The particular merit of Professor Johnson's treatment lies in the skill with which he has set forth in due relation and proportion the factors in the development of colonial commerce. chapters describing growth and policy by periods of time (1600-1660-1700-1776-1789) are combined others devoted to geographical influences, the fisheries, the coasting trade, and the organization of commerce. Professor Johnson also contributed the first chapter of the part devoted to the foreign trade of the country in the national period, giving a survey of American commerce and industries about 1789. The remainder of this part, by Professor G. G. Huebner, supplies the best connected account of our foreign trade that has been written. With free use of the statistics which begin with the federal government the author analyzes the growth in quantity and the change in quality of our exports and imports in the different periods (1790-1815-1860-1900-1913). Concluding chapters treat in particular of trade with our non-contiguous possessions, the organization of foreign trade, and commercial treaties.

Dr. Van Metre, the author of the two parts of the work devoted to internal commerce and coastwise trade, estimates the value of the internal trade of the country in 1910 at a sum tenfold the value of the foreign trade, and almost equal to the value of the foreign trade of the entire world. It would be interesting to discuss the basis and significance of this estimate, and to compare it with others that have been made. No one, at least, can dispute the vast importance of the domestic commerce of the country; and all will recognize the difficulty of

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the task that it sets the historian. To explain in its historical development the flow of wares over the vast area of the United States involves such knowledge of physical factors, transportation conditions, and the organization of labor, as scholars will acquire only after a long period of investigation and by contributions from many sources. The author has made good use of the material readily accessible, and has gone far to develop the subject, though, inevitably, there are many parts of it which he has touched lightly if at all. In his study of the fisheries he has had a smaller and more manageable topic but one so much less important that it scarcely deserves to be treated in the detail in which it is set forth.

The last part of the second volume includes besides an admirable bibliography and a chapter by Professor G. G. Huebner on Tariff provisions concerning the shipping and foreign trade of the United States, chapters by Dr. D. S. Hanchett on The machinery of federal regulation of commerce, The consular service of the United States: its history, commercial functions, and influence upon American commerce, Policy of the United States towards shipping and ship-building, and Improvement of rivers and harbors and regulation of waterways.

The reviewer, in seeking to summarize his estimate of the work, finds in its contents only insignificant details to which he would take exception, and a great amount of excellent work which he believes American economists should accept with gratitude. He does miss such attention to the needs of the professional scholar as he thinks might be expected in a work based on the Carnegie endowment. The statements of the text are not sufficiently documented; references and titles are not always clear. Professor Johnson's note (I:112 ff.), on the sources of information on colonial commerce, is an admirable illustration of what a work of this kind may offer; and the lack of a similar study on the sources of the national period deserves criticism. The whole study of the foreign trade in the national period rests on a statistical basis; but on what do the statistics rest, what do they mean and how far are they to be trusted? The reviewer has been unable to find in published sources any satisfactory answers to these questions, and regrets that they have not been investigated in connection with the present publication.

CLIVE DAY.

A Study of Industrial Fluctuation. An Enquiry into the Character and Causes of the So-Called Cyclical Movements of Trade. By DENNIS HOLME ROBERTSON. (London: P. S.

King and Son, Ltd. 1915. Pp. xiii, 285.)

Mr. Robertson holds that the theory of crises is "a case in which, in the deathless words of the Dodo, everybody has won and all must have prizes, in the sense that almost all the writers who have made any serious contribution to the study of the matter appear to have had a considerable measure of right on their side." Hence his "conviction that the most important work which remains to be done lies in the direction of developing and synthesising the various and often conflicting opinions which have been already expressed." He hopes that his own book makes "an approach to such a synthetic exposition, with perhaps enough of original suggestion and illustration to justify its claim

to rank as an independent work" (pp. 1, 2).

First he discusses the fluctuations of particular trades. His leading results are as follows: (1) The longer the "time necessary to construct and prepare for use" the equipment required by an industry, "the longer will the period of high prices continue, the greater will be the over-investment, and the more severe the subsequent depression" (pp. 13, 14); (2) temptations to overinvestment are fostered by "accessibility to investable resources"; (3) the larger the size of "the most usual unit of investment" the greater the danger of over-enlarging productive equipment; and (4) the longer the working life of this equipment the longer is depression likely to last. (5) Industries dependent upon annual harvests for their chief raw materials are subject to trouble-making fluctuations in costs; (6) even in "constructional industry" changes in the prices of minerals "play an important if subordinate" role (p. 64); and (7) so too does invention. On the side of demand, the chief causes of fluctuations are fashions, wars, tariffs, "crop volumes," and "crop values." "Generally speaking the effect of an increased crop volume is to increase the demand both for land and sea transport, and so indirectly for the products of the iron and steel trades" (p. 75). Large harvests are also likely to encourage investments in productive equipment, especially in new and rapidly developing countries (p. 85). An increased crop value generally involves "an increased demand for the products of constructional industry" (p. 89); but if it occurs "when the constructural boom is far advanced" it may check further construction by cutting down the prospective demand for non-agricultural consumers' goods, and by absorbing an undue share of the now scanty lending power of the banks (pp. 92, 93). In England "a low price of grain . . . is correlated with an increased prosperity of the consumptive trades" (p. 110); in America "there is evidence of a connection between cereal prosperity . . . and the demand . . . for imported food-stuffs"—particularly coffee (p. 104).

All this discussion of fluctuations in particular trades is based on a study of actual business experience as recorded in statistics, the annual commercial histories of the *Economist*, etc. It is realistic in manner and instructive in substance. But when Mr. Robertson advances to the study of the Fluctuations of General Trade (part II), he suddenly abstracts from the fact that industry is conducted by business enterprises in quest of profits. "For the sake of simplicity the argument . . . [is] so framed as to apply primarily to a society in which industrial policy is in the hands of coöperative groups of producers supplying jointly the needful capital, enterprise and labour, and exchanging their products directly with one another" (p. 206).

Now Hamlet without the Prince of Denmark is scarcely quainter than a study of industrial fluctuation without the business man. And just because Mr. Robertson is a consistent logician this mutilation of his subject has the unhappy consequences one is entitled to expect. Since he really inquires what would happen in a barter economy run by coöperative laborers he sheds little light on what does happen in a money economy run by business men. Nor does his supplemental chapter on The Wage and Money Systems make his analysis of an imaginary world applicable to capitalistic money-making England. That could scarcely be accomplished short of recasting the whole of part II on the excellent model of part I.

As I see it, Mr. Robertson is an acute reasoner, with admirable command over his materials, who has chosen an unfortunate method of inquiry. We do indeed need analysis of what goes on beneath "the money surface of things"; but the way to get it is to go through money to that for which the money stands—not to conjure up a world from which money is excluded.

WESLEY C. MITCHELL.

The Marketing of Farm Products. By L. D. H. Weld. (New York: The Macmillan Company. 1916. Pp. xiv, 483. \$1.50.)

An excellent elementary description of the general functions performed by the different distributing agencies which handle farm products is embodied in this book. It is the first scientific work which will serve as a textbook for the vocational training of students in the marketing of farm products. The subjects treated are: the fundamentals of marketing, marketing at country points, methods of sale, functions and organizations of wholesale produce trade, middlemen of the wholesale produce trade, sale by auction, cold storage as a factor in marketing, the cost of marketing, transportation as a factor in marketing, the prices of farm products, remedies, and governmental activities.

Inasmuch as few data on the processes of marketing have been gathered, this author has an especially difficult task. Previous writers, with a few exceptions, have been content with following certain well-known assumptions of economic theory. Mr. Weld, on the other hand, displays an intimate knowledge of marketing processes which has been gained through extensive investigation. He says, however, that this is not a proper time for generalization, Yet the work does not lack a point of view. In theory it follows

traditional lines. Professor Weld explains that public interest in marketing problems is due to a more rapid rise in consumers' prices than in wages. Middlemen have been wrongly criticised for consumers' prices being so much higher than the prices paid producers, and the margin has been thought larger than it is. shows what this margin is for certain products, and is of the opinion that the services performed by each agency handling farm products are mechanically necessary for distributing producers' products to consumers. Without in any way attempting to prove his position, Mr. Weld draws the inference that the price reported to have been received by each of the marketing agencies for their services is reasonable; and says that the wholesaler works on a small margin which represents efficient service, while the retailer works on a larger margin which should not be regarded as profit but as the cost of an increasing service demanded by the public. Activities of middlemen such as to have to do with making profits for themselves but which are not socially necessary receive little or no attention in this book.

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The author concludes that the auction method of marketing is efficient because of the necessary services performed. At the same time he admits that it would take "considerable careful investigational work" to settle the question of the power of auction companies to manipulate prices in the interests of the wholesale houses who may own or control their stock. It seems that efficiency in the performance of any business function can not he determined apart from a thorough knowledge of the price charged for such service, both direct, in the form of commission fee or gross profit, and indirect, in the form of manipulated price and control of the market generally. What the author really has in mind at this point, as throughout the book, is industrial efficiency, that is, an economical expense of energy in systematically and quickly performing a necessary function in the movement of products from the producer to the consumer. But necessity for the doing of a task is not justification for the charge made for it; and it is the latter that consumers and farmers have in mind. What the farmer is interested in is efficiency in terms of price. He desires the highest possible price. In common with the employers of agents generally, he wants the middleman to take as little as possible consistent with the support of that system of organization which shall maintain the higher level of prices. The author would justify the middleman to the less scientific public without answering its point of view. Efficiency can not be proved apart from its per unit dollar cost, which, according to all farm management and scientific management literature, should be reduced to a minimum.

Chapter 12, on the Prices of Farm Products, presents the usual supply and demand theory. No questions are raised; no problems are stated; all are solved by the supply and demand theory. But the chapter on Price Quotations shows clearly that the making of quotations is in the hands of the buyers, who can not be considered an impartial source of information. It might be asked, Is not the supply and demand at any given time largely conjectural? and Is not the system of quoting prices a means of trying to impress others with the thought that the supply is large or small according to the interests of price reporters? The author points out that the prices quoted by the wholesale receiver are at a lower level than those quoted by the jobber, the one receiving from shipper being interested

in a low price and the jobber selling to the retailer being interested in a high price. And yet he does not mention the system of quotation of prices as a factor in the determination of price. Also lacking is a consideration of the effect upon prices of the greater concentration of ownership of grain elevators, alliance between line elevators and railroads, large fees for membership in boards of trade, state grain dealers' associations, and the presence or absence of farmers' elevators. The author at this point is to be contrasted with Messrs. Coulter and Powell, both of whom think organization a factor in determining prices to producers,

He does admit that grade affects value and consequently price and that determination of grade is largely in the hands of buyers, but the method of grading is not mentioned among the factors affecting prices. Mixing grain is a means of raising grade for the buyer but not of price depression to the producer. This position might be true on the basis of the assumption of the existence of free competition in country markets, a condition which extensive investigation has shown may or may not prevail. It is a notorious fact that middlemen frequently either reject a shipment or refuse to pay the market price because they claim goods do not come up to grade. Extensive investigations conducted by the North Carolina Division of Markets in cooperation with the Office of Markets of the United States Department of Agriculture have proved that knowledge of grade does not enable producers to obtain a higher price for cotton and that the determination of the grade of a product by buvers is a means of depressing the price to the producer.

The defects in the system of marketing farm products which the author mentions are defects only from the social point of view; and a defect from the social point of view may be highest efficiency from the point of view of the individual profit-maker. It is not in the interest of economic science both to fail to represent and to mix these two points of view. To the profit-maker, defects may be differential advantages of prime importance. The weakness of farmers as salesmen and their disorganization generally, the weakness of consumers as buyers and their disorganization generally, may be utilized as a means of profit to the middlemen. Taken together these advantages may account for wealth centralizing in the hands of tradesmen rather than in the hands of agricultural land owners. This is a reversal of the Ricardian prophecy; but in this book we find no diver-

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gence from Ricardian logic. While from the theoretical point of view the author has made no contribution, from the point of view of descriptive economic history he has made an excellent beginning in a field that has been all but barren. A consistent supply and demand theory would be laissez faire. However, Mr. Weld, like others of his school, does not see "defects" as an essential part of the profit system, which as such should receive full interpretation, but as evils that may be eradicated through education and government regulation. In the main he holds the present marketing system sufficiently efficient to continue as a foundation for any gradual changes that need be made.

WILLIAM R. CAMP.

North Carolina Agricultural Experiment Station.

#### NEW BOOKS

ALLART, H. and A. Traité théorique et pratique des marques de fabrique et de commerce. (Paris: Rousseau. 1915. 12.50 fr.)

Hooker, W. H. The handicap of British trade. With special regard to East Africa. (London: Murray. 1916.)

JUGLAR, C. and THOM, C. W. A brief history of panics and their periodical occurrence in the United States. Revised and enlarged edition. (New York: Putnams. 1916.)

Landry, A. Notre commerce d'exportation avant, pendant et après, la guerre. (Paris: Dunod. i916. Pp. 244.)

Mori, P. Neue Wege schweizerischer Exportpolitik. (Zürich: Füssli. Pp. 56. 2 fr.)

According to Dr. Mori, the main problem confronting Switzerland is not what means to adopt for the purpose of fostering her foreign trade but how to increase the productive efficiency of her manufacturing industries. Like England, Switzerland rose commercially in an era of industrial freedom and like England she is handicapped today because her industries are organized on too competitive a basis.

The industrial units of Switzerland are too small as compared with those of Germany or of the United States. As yet, she is able to compete successfully in the markets of the world, but unless she changes her methods of production she is fighting a losing fight. What Switzerland needs is not an elaborate system of foreign trade promoting institutions but a consolidation and an integration of her manufactures.

The first part of Dr. Mori's pamphlet is devoted to a refutation of what he terms two main theories upon which has been based the recent agitation in Swiss periodicals for a policy of commercial expansion. In reality the author considers not theories but two assumptions, the first being that Swiss industry is retrogressing

and the second that the increasing importation of foodstuffs into Switzerland must be met by an increased exportation of manufactured goods. In discussing the latter thesis Dr. Mori reveals rather confused ideas regarding the relationship between the consumption of food-stuffs by laborers and the amount of values which these laborers with the aid of power and machinery may create. He thinks that the theory leads to a vicious circle, which undoubtedly is not the case.

The work concludes with a number of suggestions as to the establishment of sample rooms, information bureaus, as to the reorganization of the consular service, etc.

S. LITMAN

Stowell, E. C. Consular cases and opinions. (Washington: Byrne. 1916. Pp. 847. \$5.)

VOSE, E. N. The world's markets, from the point of view of American exporters. (New York: Business Training Corporation. 1916. Pp. 190.)

WATKINS, E. Shippers and carriers of interstate and intrastate freight. (Atlanta: Harrison Co. 1916. Pp. cxv, 1057. \$7.50.)

Les zones franches et l'exportation française, documents et arguments réunis par la Chambre de Commerce de Marseille. (Paris: Alcan. 1916. 3.50 fr.)

Accounting, Business Methods, Investments, and the Exchanges

Principles of Auditing. John Raymond Wildman. (Brooklyn: The William G. Hewitt Press. 1916. Pp. 196. \$2.00.)

Since the publication of Professor Montgomery's Auditing, the announcement of a new book on auditing has seemed, at first thought, almost a presumption. Why burden the printing presses, the book stores, and the libraries, with another form of the same thing? for the standard already set is so high that the chance of improvement as a whole has seemed hardly worth the cost. Such queries are inevitable at the sight of the title of Professor Wildman's book. The answer to those queries comes on reading the book. The title seems a misnomer, for the book does not attempt to do what some readers, at least, expect in a book bearing such a title. Professor Wildman has himself recently, in an address before the Eastern Commercial Teachers' Association, attempted to define "science," "art," and "technique" as applied to accounting. Even under Professor Wildman's own definitions—and the case would not be altered if one attempted

no such fine-drawn definitions—a more appropriate title for the book would seem to be "The Technique of Auditing." Most of the chapter headings suggest processes rather than principles, as What to do before beginning an audit, Counting the cash, The mechanical work, How to end an audit. Again and again a discussion of principles of accounting is waived as out of place. For example: On page 134, the author says "there are so many conflicting theories regarding good-will that it does not seem wise to lay down any rule for same"; on page 145, regarding the establishment of sinking funds from income or from capital, we read that "it is not thought necessary here to discuss the relative advantages and disadvantages of the two methods," and only slight implication is given that the difference, which is fundamental and perhaps as important as anything with which an auditor has to deal, is anything more than one of bookkeeping method; and on page 112, after the reader is left a little in doubt whether the author favors inventory at cost, or lower when the market is lower, recommendation is made that in case of desire either to write down or to write up inventories adjustment may be made by a credit to a reserve; in the first case with a debit to profit and loss and in the second with a debit to inventories, but no suggestion is made that these two credits to a reserve are fundamentally different, one representing a hole in the assets and the other showing a supposed profit. It would be very unfortunate if, in a book actually discussing the principles of auditing, both the auditing principle of refusing to count chickens before they are hatched, and the accounting (and therefore auditing) necessity of distinguishing holes in assets from accumulated gains, were passed over in order to make room for the mere bookkeeping entries. In view of the fact that the arguments for or against any accounting theory are often based on its effect when applied to the income sheet and the balance sheet, a decision between opposing theories or a statement of the arguments seems fundamental in a discussion of the principles of auditing. Curiously, then, the accusation of filling no need, that would lie against the book if it were true to title (or to the reviewer's interpretation of title), it escapes because it does not attempt in fact to discuss matters of principle.

The foreword suggests the scope of the book. It tells the experiences of a young man who was threatened with failure as an

auditor because he had had no opportunity to learn customary details of technique. From that point to the end of the book detailed suggestions, usually concrete, clear, wise, for procedure, for forms, for records, follow each other in a more or less logical order—a chronological order is sometimes more and sometimes less logical than others. One wonders at the suggestion that the footing of the disbursements be left (p. 92) to the cash-book clerk whose work is under audit: this looks like advising the auditor to allow the cashier to audit himself. A few such items need more elucidation than the context suggests.

Usually, though sometimes the contrary is true, the suggestions are so detailed that the basic assumption seems to be that the reader knows but little about bookkeeping, which is both wise and dangerous: wise because it gives the book large technical completeness, but dangerous because it may create the supposition that any one who will follow the directions given can properly audit accounts. Few indeed are accounting tasks that can be carried to completion properly by rules of thumb, and fewer are those of audit. The important fact to realize about the book is that not only its emphasis but its bulk is devoted to those things which are largely matters of routine. This is well illustrated by the treatment of methods of auditing receipts. Much attention is devoted to describing processes of checking indirect records of receipt and of liability against the corresponding direct records; but few hints are given of the great difficulty of discovering the fact when neither direct nor indirect record was ever made and when the indirect record has been sequestered. Yet this is one of the important tasks of an auditor, though sometimes impossible of actual performance because of inadequate internal checks. When one realizes the difficulties of auditing receipts adequately, and the need usually of going beyond routine procedure, the routine matters discussed in this book are important, time-saving, and helpful in many ways.

Akin to the apparent neglect of the difficulty of auditing receipts adequately is the discussion of the form of auditors' certificate. Positive assurance of the correctness not only of the balance sheet but of the income sheet and of the profit and loss account appears (p. 175) to be required of the auditor, on the ground that to give less than this is to shirk responsibility.

Such assurance is without doubt desirable, but, except when auditors have evidence of internal check much more nearly adequate than most of them can now obtain in their engagements, it not only is more than they can take responsibility for giving but is likely to give false security to clients. The creative work of recommending adequate internal check for use between audits is not dwelt upon in the book, possibly because it is not a matter of auditing routine or technique.

Both for what Professor Wildman's book attempts to do, therefore, and for the way it does its work, it is well worth while. With the qualification that it should be accompanied by discussion of other, and even more important, aspects of auditing, it is to be recommended highly for use wherever auditing is to be studied. No discussion of auditing is complete without the sort of things that this book gives, and many things are not available, so far as the reviewer knows, anywhere else in book form.

WILLIAM MORSE COLE.

Harvard University.

Value for Rate-Making. By HENRY FLOY. (New York: McGraw-Hill Book Company. 1916. Pp. viii, 322. \$4.)

The purpose of the author is very frankly stated in the preface. His object is to prove that "the basis for rate-making should be the fair present value of the property used, regardless of the amount of the original investment in utilities established previous to the present public regulation régime"; that in this fair present value should be included not only the present value of the tangible property but the full value of all intangible property; and, lastly, that from the cost new should be deducted, as depreciation, only the "absolute" depreciation "which is in evidence, existing and determined by inspection." Deductions from the cost new for losses in value arising from obsolescence and inadequacy should not be made in rate cases, as figures representing such losses can be obtained only on "assumptions and computations."

Mr. Floy's work can best be characterized as a voluminous brief made not by a lawyer but by an engineer to substantiate the above claims and to support them by excerpts from many decisions of courts and commissions.

The volume might be of some assistance to a lawyer engaged

in an attempt to prove that a public utility company is entitled to have the highest possible value established as the fair basis for rates but it can not be accepted as the sound and impartial treatment of the subject of valuation which should be expected as the work of a trained engineer. On the contrary, the method of presentation is such that many false conclusions might be reached by one not familiar with the subject of valuations. As an example of several that could be cited is the discussion of reserves for depreciation (p. 245 et seq.). It is there stated that not only courts and commissions "but the Supreme Court itself has ruled on this question and held that only expenditures actually made can be claimed as proper deductions from earnings." Pages of arguments and quotations follow to prove that public utility companies in the past have not been allowed to make reserves for the renewals inevitably required at some later date. To one not familiar with the subject or not closely following the author's argument, the impression is given that the courts will permit only the cost of current maintenance to be included as a portion of operating costs. The author later, in a single paragraph unsupported by quotations from later court rulings, clears himself by stating that "the amount of the annual theoretical depreciation should be estimated and provided for out of revenue each year."

The above example may be taken as characteristic of the method pursued by the author in establishing his contentions. His claim for reproduction cost new as virtually the fair basis for rates is supported by pages of arguments and quotations to prove that original cost, amount and value of stocks and bonds, gross revenue and operating expenses, as well as worth of service can have little or no weight as evidence of the value, in a rate case, of the property of a public utility company operating "previous to the present public regulation régime." As a consequence, he claims that the reproduction cost must be accepted as the one and only proper criterion of value. However, he again clears himself by a short statement in which it is admitted that the Supreme Court has ruled that, in establishing the fair basis for rates, all of the above information should be obtained and presented to the rate-making tribunal as evidence to be weighed by it.

The author's treatment of the subject of depreciation is wholly

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his own. His claim is that, in a rate case, the cost new should be reduced only by what he terms "absolute depreciation" and that there can be no reduction in value due to the "inadequacy" or "obsolescence" of elements of the property. To support this contention arguments and quotations are presented which, if fairly analyzed, are often based on false premises and are in no way helpful to one seeking a clear understanding of depreciation and of its effect upon the value of property. The author is justified in his endeavor to prove that a company, which in the past has made no reserves for renewals and has paid for necessary repairs and replacements from income, should not now be penalized by a reduction in the value of its property by amounts which modern theories hold should have been made to care for future renewals. He is not justified in claiming that there is no loss in the value of the investment of a company in perishable property arising from obsolescence or inadequacy when a fair basis for rates is sought. Nor is he justified in using many of the arguments which he presents in support of his case.

Value for Rate-Making will not be found particularly helpful to those seeking a general knowledge of the subject of valuations.

HAMMOND V. HAYES.

Brokerage Accounts. By Frederick S. Todman. (New York: Ronald Press Company. 1916. Pp. 338. \$3.50.)

Brokerage Accounts by Frederick S. Todman is a timely and able treatise in an important field of American business life. While many other phases of our security and produce markets have been treated in books and articles, no attempt worth mentioning, except in relation to clearing-house records, had previously been made to present in detail and in classified form the numerous books of record that are generally used by stock and produce exchange firms. As the author states, "the work is of a pioneer nature," since there were not available for consultation "works of others in this field, and beyond a few scattered references, there is an utter absence of literature treating the accounting feature of brokerage as practiced in this country."

Mr. Todman's book is to be commended for its detailed classification and simple style, the work aiming to serve a textbook use. There are 34 chapters grouped into 5 parts: I, Stock Brokerage; II, Cotton Brokerage; III, Produce Brokerage; IV, Brokerage Auditing; and V, Forms. Part I is devoted to a discussion of the individual books and records (each being discussed separately and at the proper place) used in the stock market. The various books and records are analyzed and explained in detail in separate chapters with respect to form, ruling, and arrangement. An explanation of the purpose of and the principles underlying each is also furnished. Parts II and III do respectively for cotton brokerage and produce brokerage what part I does for stock brokerage. Part IV consists of four chapters devoted to brokerage auditing, and Part V to numerous forms, grouped into separate chapters, relating respectively to stock, cotton, and produce brokerage.

While the book deals almost exclusively with books of record and aims essentially to be a contribution to the science of accounting, such a work must necessarily deal somewhat with market practices if the reader is to understand the author's main thesis. Accordingly, Mr. Todman makes frequent reference to and offers brief definitions or explanations of numerous terms and practices which are vital to the brokerage business and indirectly related to the subject of accounting. The book may therefore be read with profit by those who are not primarily interested in accounting. Moreover, careful students of a subject usually welcome a detailed presentation of forms used in business. Mr. Todman has fortunately seen fit to supply a voluminous list of such forms. No less than 55 pages of forms are reproduced, comprising 29 forms used in stock brokerage, 37 in cotton brokerage, and 4 in produce brokerage.

S. S. HUEBNER.

## NEW BOOKS

- Adams, H. F. Advertising; its mental laws. (New York: Macmillan. 1916.)
- Brown, H. J. Timber estimating in the Pacific northwest. Second edition. (Portland, Ore.: Brown & Brown. 1916. Pp. 31.)
- Buck, G. Trademark power; an expedition into an unprobed and inviting wilderness. (Chicago: Munroe & Southworth. 1916. \$1)
- CABRERA, C. T. The real estate business; an elementary textbook. (Philadelphia: G. E. Spindler. 1916. Pp. 32. \$1.)
- HOFFMAN, G. L. Simplified bookkeeping. (McKeesport, Pa.: G. Lawrence Hoffman Co. 1916, Pp. 58. \$2.)

- HOTCHKISS, G. B. and DREW, C. A. Business English. (New York: Am. Bk. Co. 1916.)
- Hull, A. M. Practical plans for getting new business; a book of helpful hints for retail coal merchants. (Chicago: Retail Coalman. 1916. Pp. 156. \$1.)
- Legg, A. D. Rapid calculator for earned and unearned premiums.
  (Baltimore: Calculator Co. 1916. Pp. 14. \$2.)
- MacFarlane, C. A. Principles and practice of direct advertising. (Hamilton, O.: Beckett Paper Co. 1915. Pp. 190. \$1.)
- MINTURN, J. A. Price-regulation under patents. (Indianapolis: Minturn & Woerner. 1916. Pp. 56.)
- Otis, D. H. Farm accounts simplified. (New York: O. Judd Co. 1915. Pp. 42. \$1.50.)
- SMART, W. K., editor. How to write business letters; in collaboration with the editorial staff of "System." (New York: A. W. Shaw Co. 1916. Pp. 160. 70c.)
- SPENCER, E. L. The efficient secretary. (New York: Stokes. 1916.
  Pp. 192. \$1.)
- Webster, E. H. English for business. (New York: Newson & Co. 1916.)
- Advertising. (Indianapolis: Special Libraries Assoc. 1916. Pp. 59-82.)

A list of references on advertising, compiled under the direction of H. H. B. Meyer, of the Library of Congress.

- Bonds legal for savings banks in the states of New York, Massachusetts, Connecticut, and Vermont. (Boston: Hornblower & Weeks. 1916. Pp. 21.)
- The practical traffic training service established by the American Commerce Association, qualifying men for higher efficiency in traffic management. (Chicago: Am. Comm. Assoc. 1916. Pp. 128.)
- Uniform system of accounts for electric light and power utilities.

  (Denver: Colorado Public Utilities Commission. 1916. Pp. 73.)

# Capital and Capitalistic Organization

- The Federal Trade Commission. By John Maynard Harlan and Lewis W. McCandless. (Chicago: Callaghan and Company. 1916. Pp. vi, 183.)
- A Manual of the Federal Trade Commission. By Richard S. Harvey and Ernest W. Bradford. (Washington: John Byrne and Company. 1916. Pp. xxii, 457.)

Both these volumes are legal manuals dealing with the Federal Trade Commission and its powers. In essence they are merely analyses of the various provisions of the Federal Trade Commission act and of the Clayton act, in so far as the commission has powers thereunder. Although there is apparently a considerable discrepancy in the size of the two volumes, this is not as great as it appears, since approximately half of the Harvey and Bradford volume is devoted to appendices reproducing the rules of practice and forms used by the Trade Commission, the Clayton and Federal Trade Commission laws, various other statutes, a list of prosecutions under the Sherman act, etc.

The principle difference between the two volumes lies in the method of treatment. The Harlan and McCandless volume is divided into four chapters, the first containing a very brief statement of the nature of the commission, the remaining three consisting of discussions of the three principal powers of the commission: the regulative power, the advisory power, and the investigative power. The discussion throughout is based in a large measure upon various legal decisions on points connected with the functions of the commission.

The method followed by the Harvey and Bradford manual, on the other hand, is that of an analysis based upon the previous legislative and judicial development of trust regulation. The work of the commission is analyzed from the standpoint of the things to which its authority extends, rather than as in the other manual from the standpoint of the powers themselves. Thus in the Harvey and Bradford volume we find a discussion of the provisions of the new trust laws as they relate to banks, common carriers, labor, patents and copyrights, trademarks and trade names, etc. In addition the book discusses injunction and contempt proceedings, immunity of witnesses, abuses of corporate control, etc.

On the whole it may be said that the Harvey and Bradford volume is considerably broader in its scope than the Harlan and McCandless study. This perhaps naturally follows from the fact already alluded to that it considers the Federal Trade Commission and Clayton acts from the standpoint of, and in connection with, previous legislation and judicial decision on trusts. At the same time the reviewer ventures to express the opinion that the Harlan and McCandless study will prove equally valuable if not more valuable than that of Harvey and Bradford, especially for the lawyer. The three principal chapters

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already referred to, dealing with the regulative, advisory and investigative powers, are carefully sectioned and the method of treatment seems to be a study of the acts by classifying and analyzing their provisions under these three divisions and using the legal decisions to support the various points which are made in the discussion.

Both volumes contain some examination of the subject of unfair competition, but the discussion in the Harvey and Bradford volume, outside of the enumeration of certain practices, practically confines its attention to unfair competition in the older legal sense of passing off or substituting goods as and for the goods of another. The Harlan and McCandless volume, on the other hand, in its discussion of the regulative power devotes considerable space to the consideration of those other methods of unfair competition such as local price cutting, fighting brands, etc., methods to which the power of the commission undoubtedly extends.

W. H. S. STEVENS.

Tulane University.

## NEW BOOKS

COTTER, A. The authentic history of the United States Steel Corporation. (New York: Moody Mag. & Bk. Co. 1916. Pp. x, 281.)

The purpose of this book as stated by the author is "to narrate in as interesting a form as he is able, the principal events leading up to the incorporation of the mighty company, to tell its objects and its policies and the results therefrom on labor, the corporation itself and industry generally." In this narration the writer shows, as he acknowledges, a prejudice in favor of the corporation, the organization of which he believes "marked the dawn of a new and better era in industrial history." The business ethics of the corporation, as illustrated in fair competitive methods, humane treatment of employees, a moderate price policy, and publicity of business dealings is attributed to the initiative of Judge Gary, to whom the book is dedicated.

The work is not a scientific account of the factors determining the growth and policies of the Steel Corporation. Too much is made of purely personal influences and too little of industrial conditions. In treating the relations of the corporation to its employees the writer apparently justifies the company's refusal to deal with the labor unions on the ground that "unionism is opposed to efficiency"—efficiency having for the author a purely business rather than a social significance.

In the reviewer's judgment the best parts of the book deal

with the price policy of the corporation including its attitude toward competitors, the circumstances leading to the purchase of the Tennessee Coal, Iron and Railroad Company, the character and significance of the much talked of Gary dinners and the efforts of the corporation to conserve the health and safety of its employees. While one may admit that there is much to commend in the business policies of the company, and that its formation represents an advance in business standards, one can hardly subscribe to the rather rhetorical statement that "the organization of the United States Steel Corporation was the greatest step that has ever been made toward the highest form of socialism."

ABRAHAM BERGLUND.

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- Hale, W. B. The law of private corporations in Illinois. (Chicago: Callaghan & Co. 1916. Pp. xviii, 562. \$5.)
- Humphrey, R. B. Texas telephone laws. (Austin, Tex.: A. C. Baldwin Prtg. Co. 1916. Pp. 90. \$3.)
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# Labor and Labor Organizations

Principles of Labor Legislation. By John R. Commons and John B. Andrews. Harper's Citizen Series, edited by William F. Willoughby. (New York: Harper and Brothers. 1916. Pp. 524. \$2.00.)

This book is the first in English to give a systematic account from the standpoint of the economist of the whole field of labor legislation. It is properly comparable with such works as Pic's Lois Ouvriéres and Frankenstein's Arbeiterschutz. It differs, however, from these treatises in that it makes much less use of the comparative method. In the main, it gives attention to foreign legislation only when the particular kind of legislation has not been introduced in the United States or is in an experimental stage.

The description of the legislation is adequate and the compression, obviously necessary where so much ground had to be covered, has been done with great skill and judgment. Nowhere else will the reader find in brief space such excellent descriptions

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of the great forms of labor legislation. It is regrettable that the authors have not set forth more fully the conditions which the legislation is designed to remedy. For example, the three pages (pp. 261-264) devoted to the description of the problem of unemployment, while excellent, fail utterly to give the necessary background for the description of the legislation.

The most serious defect in the book, however, is the almost complete absence of clear and systematic statement of the principles on which labor legislation should rest. At almost every point, where real difference of opinion exists, the authors fail to indicate clearly the principles on which decision must be reached. Even where principles are developed in one section the authors frequently do not apply them to the legislation treated in another section. An illustration may be drawn from a field in which there is much difference of opinion. In the chapter on Collective Bargaining, the authors say: "Trade agreements are likely to be tolerably satisfactory to both sides as both have had a voice in framing them. In real collective bargaining also lies the protection of the public. It means fair conditions for labor and yet conditions under which industry can operate. It is an assurance of a minimum of industrial disturbance. Restrictions in the law upon collective action upon either side are inconsistent. with collective bargaining." When the authors pass in the same chapter to the subject of coercion by government they carry with them presumably the general proposition that the exercise of coercion over collective bargaining is undesirable. But at no point do they definitely apply the principle to the subject of compulsory arbitration. Would the authors apply the principle of freedom of collective bargaining so rigidly as to exclude even compulsory investigation?

The great question of the incidence of the cost of social insurance is dealt with in much the same cursory manner. "The expense of work accidents" the authors tell us (p. 357) "should be treated like all other expenses of production: it should be borne by the employer in the first instance and be shifted by him in the form of increased prices upon the consumer of those goods in the production of which the injuries were sustained." In a later part of the book (p. 462) it is argued that "compensation laws, by requiring him [the employer] to pay for all accidents instead of merely those he can not escape, tend to

bring upon him a universal pecuniary pressure like that of taxation which induces him to prevent all accidents and to provide for early recovery of the victim." If imposing the cost on the employer in the first instance tends to reduce the number of accidents, there is an argument in favor of that method, and here we have at least the beginnings of a principle. When we reach the subject of sickness insurance, however, we are told that "the cost of insurance is usually distributed between the worker and the employer, and in some countries the government also contributes a share. By this device the employer is compelled to bear some portion of the cost of sickness among his employers . . . " But why will the employer not shift the cost of sickness insurance? Does the imposition of the cost on the employer tend to reduce the amount of sickness? No sustained appeal is here made to the larger principles which should underly the distribution of the cost of social insurance. Here and there one gets glimpses of principles, but they are never logically coordinated. The reader is certainly entitled in a book on the "Principles of Labor Legislation" to a clear statement of principles and to the application of those principles to the actual problems of legislation.

The part of the book in which the authors break most new ground and the part which will consequently prove most interesting to students of the subject is the chapter dealing with administration. This chapter is in effect an argument for administration by a commission. It has been prepared with great care and is by all odds the best part of the book. It will probably long remain the most forceful statement of the advantages of that form of administration. The undoubted advantages of consolidating the administration of labor legislation in the hands of a single agency is unanswerably argued. The point at which doubt arises is the desirability of conferring such large powers of legislation upon a commission. Even here there appear to be differences among the kinds of labor legislation. It may be admitted that the protection of health and safety is too intricate a matter to be dealt with successfully by a legislature. It seems clear also that the standards to which a commission must resort in framing administrative orders intended to protect health and safety are such as to admit of definite application. The question whether a particular safety

device shall be installed turns on purely objective considerations. If it can be shown that accidents are attributable to the lack of such a device the commission has safe ground under its feet. But the case for administrative regulation of the working hours of women is not equally strong. This Wisconsin law, for example, authorizes the Industrial Commission to fix rules "prohibiting the employment of females for such periods of time as may be dangerous or prejudicial to the life, health, safety or welfare of such female." Is the relation of hours of work to health so clearly defined that a commission can say that the protection of the health of women requires that women shall work eight hours rather than nine? It is not, of course, sufficient that there shall be some relation between health and working hours but the relation must be clear enough to afford a standard for the guidance of the commission. Must it not be admitted also that the question of hours is complicated by other issues than that of health? The desire to secure a normal human life is implicit in all such legislation. But here we come into a field where there are no generally recognized standards.

In the absence of such standards, what action is the commission likely to take? Under the plan urged by the authors the commission would be required to submit all proposed orders to a council made up of representatives of the employers and the workmen. Such a council would naturally influence greatly the attitude of the commission. It is important, therefore, to inquire what the viewpoint of such a council would be. It is easy enough to convene a council representing organized labor and the organized employing interests. But would there be adequate representation of the unorganized members of both classes? Would such a council pay adequate attention to the legitimate needs of these classes? It is true, of course, that the legislature does not abdicate its powers finally by vesting power to issue administrative orders in a commission. But the fact that a commission had refused to issue an order would constitute a great impediment to legislative action since the legislature would ordinarily be reluctant to legislate on matters which had been entrusted to a commission.

The book will probably long remain the leading work on labor legislation, and it is certain to exercise a weighty influence on new legislation. At a time when the problems in this field are attracting more and more attention, it is a matter of congratulation that so competent and careful a book is available. It will also be joyously welcomed by instructors in college classes on labor problems who have heretofore had to refer their students to numerous treatises, most of which are antiquated both in matter and point of view.

GEORGE E. BARNETT.

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Industrial Arbitration. A World-Wide Survey of Natural and Political Agencies for Social Justice and Industrial Peace. By Carl H. Mote. (Indianapolis: The Bobbs-Merrill Company. 1916. Pp. 351, xlv. \$1.50.)

One has but to look at the history of arbitration during the last century to ask why it should ever have inspired so fervid and so obstinate an enthusiasm. It had its successes, quite enough to justify all attendant costs. It was, at the same time, shadowed by failures so constant and of such character as to raise doubts which seem never to have been met. Extremely able students and men of practical mastery in business, continued to present arbitration together with boards of conciliation as a final remedy for industrial wrangling.

"Only work out the Principles a little more prudently: only be more wary in the choice of chairman, and disputes can be reduced to a trifling minimum." Especially in France, where small industries were so long the rule, arbitration has a history showing how every peace-making device is compelled to change with each shift in the technique of industry. It must also change with the growth of organization both among employers and employed. In a large part of the nineteenth century, the French and English were always attempting to keep pace with these growths and variations. Yet these revolutions in technique and organization are but one element in the perplexities which beset the formal (arbitration) and the informal (conciliation) efforts to secure peace in industry. A change more embarrassing still is the altered mood and aim of labor.

One has but to ask, for example, what will happen when determining majorities inside and outside labor organizations honestly come to believe that wages should not, as heretofore, follow prices, but that prices should follow wages. What will

happen when the principle of the minimum and the living wage gets wide practical acceptance? Every vital claim under arbitration will present new issues and new difficulties so far as these beliefs become real. England, in the seventies, shows us honest attempts to settle disputes in coal cases with direct reference to prevailing theories of wages. That wage determination should follow prices, there seemed no manner of doubt. The sliding scale was then in evidence. In a famous case in 1875, the "wage-fund" was openly used to justify the decision. Oftener still quite different theories jostle each other in the attempt to secure peace. More and more these attempts have been abandoned for social conceptions of "distributive-justice," "general welfare," and the like which take their place. A minimum income is now to be made a first charge upon industry.

This is not a mere socialistic or labor claim, it has express sanction of competent judges in the Australian courts: a wage sufficient "for the healthy subsistence of an average family." The real test for these new views can never be judged or even known until the principle has a far wider application than to restricted groups. The fact remains that they have so far won a place in the minds of men as to furnish a basis of active legislation in several countries. Powerful private firms and corporations of the highest class have definitely accepted and put in practice the living and the minimum wage. It is thus admitted that wages should be standardized according to some test of "decency, comfort, and leisure."

If it was risky to define the words "preferential" and "hiring" under the New York protocol, it was far more hazardous to state, to the satisfaction of both parties, what "a good union man" is. The attorney of the union put it plainly: "All we ask the manufacturers is to preserve the provisions of the preferential union shop as we see it." "As we see it"—not as the employer sees it, not as the public sees it, nor as anybody sees it, but as the wage-earner sees it.

Now the above definitions are simplicity itself when compared to interpreting life standards of "decency, comfort, and leisure," under the organized pressure of powerful bodies convinced that wages should be a first lien on industry and the standard of "decency, comfort, and leisure" shall be determined "as we see it."

Mr. Mote's study shows in every chapter-history and appli-

cation alike—what these future entanglements may be for arbitration. Like our Massachusetts act, it will prove upon the whole worth while, but in no sense a "solution" to any of the deeper sources of industrial friction.

With appendix and index, the present volume contains 14 chapters professing to give "a world-wide survey of natural and political agencies for social justice and industrial peace." About half the book is given to European and Australian experience; the rest to our own country, with chapters on interstate strikes,

on the Colorado strike, and on trade agreements.

It is made plain that neither the significance nor the promise of arbitration can be seen apart from the more important economic and legislative changes under which arbitration must act. There is again a good deal of discrimination in dealing with conditions differing as radically from our own as, for example, New Zealand. We are not only warned that New Zealand is primarily a farming community; that its population is not a quarter that of our largest city; that she has less than 75,000 factory operatives as against our 7,000,000 odd; that her population is homogeneous and her immigration well under control; but that labor is thoroughly organized and this organization is publicly "recognized." The conditions were thus propitious for so much "compulsion" as employers and labor unions were willing to accept by voluntary registration. The author states that from 1893 to 1911 there were but 42 strikes, a little more than half of which were outside the scope of the law.

The reader is a good deal perplexed by Mr. Mote's use of such terms as "social justice" left without any adequate defining. Perhaps the nearest he comes to definition is in a closing passage on New Zealand's famous act. Though we are made fully aware of the great limitations of arbitration and conciliation even in Australasia, the author says:

Perhaps nothing so completely demonstrates the strength of the New Zealand system of arbitration and its underlying basis of social justice, as the Dominion's experiences with syndicalism and the efforts of the syndicalists to carry out a general strike, during the latter part of 1911, 1912, and 1913. The effort was a complete failure; and although more than fifty strikes were called during the period, all of them were lost.

And again we read (p. 326):

Given a fairer measure of industrial equality, conciliation and arbitration by state agency will no longer be very necessary because

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the two dominant factors in industry—Capital and Labor—will then have only minor matters for adjudication and these will be settled mutually without the interference of the state. Conciliation and arbitration as understood today presuppose a state of war between Capital and Labor. . . . Remove the cause of the conflict and industrial peace is sure to follow. It will follow too in certain ratio to progress in removing basic causes of the conflict.

The "cause of the conflict," "basic causes"—upon these obscurities, alas! we are given scarcely a ray of light. The author seems to be saying: "We cannot indeed dispense with the peace expedients, but no great result awaits us until "justice" and "industrial equality" have knit themselves in among our social habits; until "the worker has been set free economically." But of these misty ultimates we know far too little to turn them into remedies at this stage of the game.

These defects should by no means offset the real value with which Mr. Mote enriches his subject. An adequate historical survey is given, in which the spread and specialization of arbitration and conciliation show the service that has been rendered. For example, England in 1910 had 282 conciliation boards, 265 of them for particular trades and 17 for district or general boards. The amount of work thus appears. "In 1912, 22 disputes were settled under the conciliation act of 1896; 13 by particular boards of trade; 12 by district and general boards and trade councils; and 52, by voluntary conciliation and by individuals. In the same year, 2138 disputes were settled by permanent conciliation and arbitration boards and standing joint committees (p. 43).

In Germany, we read, "In a typical year, 1908, there were more than 1,000,000 cases of individual disputes between workmen and employers in the German Empire brought upon complaint of the workmen and about 6000 upon complaint of employers. Of this number, agreement was reached in nearly 50,000 cases." (See further, p. 85.)

Our own need of peace agencies appears in the author's statement that we in the United States have more strikes for a given number of industrial workers than Great Britain, France, or Germany—37,000 strikes from 1881 to 1905. In this period "less than five per cent of the strikes and lockouts were settled by arbitration."

The author yet holds that "the continual activity of a state board is a wholesome influence on both parties . . . and tends to create a compromising attitude among employers as well as among wage-earners." This is less encouraging than it seems because our state report for 1912 shows that a larger number of workmen were involved in strikes (in that year) than in any other year since 1881, when statistics were first compiled.

JOHN GRAHAM BROOKS.

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Summary of the Report on Condition of Woman and Child Wage Earners in the United States. Bulletin of the United States Bureau of Labor Statistics, whole number 175. (Washington, D. C.: 1916. Pp. 445.)

Various groups of persons, students, employers, social workers, and others interested in the problems connected with the employment of women and children will welcome this valuable summary of the 19 volumes that make up the report of the Bureau of Labor Statistics on the Condition of Woman and Child Wage Earners in the United States. 1 It contains a series of summaries varying in length from 5 to 53 pages; but, in the words of the report, although "no complete summarization of these summaries has been attempted . . . some of the more significant points have been indicated, which appear not in any one volume but from a study of the report as a whole" (p. 15). It is, however, this "summary of summaries" that has been so much needed, for although the 19-volume report has been known to students as a mine of valuable information since its publication, it has not been of use to those who can not take time to collect laboriously the information they desire. Moreover, if the investigation was to be used as a basis for social legislation, it was necessary to have assembled the facts bearing upon such questions, for example, as long hours and low wages.

The writer of this review recalls the agitation carried on by the various women's organizations of this country to secure from Congress the appropriation which was necessary for this inquiry. These women wished an investigation which should show what measures were needed to improve the condition of the working women and children in this country. Two different plans were

<sup>&</sup>lt;sup>1</sup> See American Economic Review, vol. II, p. 436; vol. III, pp. 195, 965.

considered: (1) to demand the appointment of a federal commission; (2) to ask Congress to give to the Bureau of Labor Statistics the money (several hundred thousand dollars) which would be necessary for the expenses of a commission of inquiry as an additional appropriation for this special investigation. The Chicago women with whom the plan originated strongly advised in favor of a Bureau of Labor rather than a commission inquiry, and this advice was accepted.

The arguments then advanced in favor of having such an investigation conducted by a government department instead of by a special commission have been on the whole substantiated. A bureau that was already equipped and organized for investigational work has produced a report which, looked at as a collection of facts, is probably far superior to anything that a commission with a hastily collected staff of "experts" would have published. On the other hand, it must be acknowledged that a commission inquiry would in all probability have been vastly more useful in promoting improvements in the condition of the working women and children in whose behalf the inquiry was planned. For example, the bureau, quite properly, makes no recommendations, whereas a commission would have brought together, at the time the report was issued and not six years later, this "summary of summaries," showing what evidence the separate reports offered on such subjects as night work, underpay, long hours, insanitary work places, industrial accidents, fire hazards, or violations of the factory laws. Moreover, great publicity would have been given to this evidence and to the recommendations accompanying it. This was what the women who worked for the congressional appropriation really wanted. Instead of this, they got the 19 volumes which contain treatises somewhat academic in character on the history of women's work together with the results of some very admirable investigations of the most important industries employing women and children. That is, instead of reports dealing with such subjects as wages, earnings, hours, conditions of employment, etc., the facts on these subjects must be laboriously collected from volumes dealing with the cotton industry (1,044 pages), the clothing industry (878 pages), the glass industry (592 pages), the silk industry (592 pages), and so on through the volumes of lesser importance. At the close of the present summary volume is to be found

a valuable section dealing with Changes in Legislation affecting the Employment of Women and Children, 1908-1915, which records, for example, the passage in a few states of such reform measures as the minimum wage laws, the legislation shortening the hours for women and the prohibition of night work. Was this great and costly investigation as influential as it might have been in securing these pieces of remedial legislation? That is, of course, a question that can not be answered. It must not be overlooked, however, that the New York Factory Investigating Commission has set an entirely new standard of the value of a commission inquiry as a basis for social legislation. Looking at the work of that commission, which so admirably combined the scientific and the practical in its investigations and which supplemented these investigations with recommendations of far-reaching importance and secured a publicity for its findings that is indispensable in securing social legislation, one who had to choose today between investigation by a commission and investigation by a government department might well cast his decision on the side of the commission.

EDITH ABBOTT.

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Law and Order in Industry. By Julius Henry Cohen. (New York: The Macmillan Company. 1916. Pp. xviii, 241; appendixes, 51 pp.)

This is an account of the workings of the so-called Protocol or agreement between the manufacturers' association and the union in the women's cloak and suit industry of New York City. Mr. Cohen was the lawyer of the manufacturers' association during the five years' existence of the protocol and speaks from intimate knowledge of the situation.

Unlike many members of his profession representing the interests of manufacturers, the author expresses his belief in strong unions and collective bargaining and recognizes the unmistakable trend "in the direction of greater industrial democracy" (p. 229). All that, however, must go hand in hand with "law and order in industry" by which he means the observance by each side of self-imposed restrictions of conduct or, as he puts it, by "law of the contract, freely made" (p. 214).

A description of the difficulties besetting the practical work-

ings of institutions created to register the joint will of two antagonistic factors, as encountered in a competitive industry which has taken, perhaps, the longest step in that direction, fills the greater part of the book. The book is written in an easy conversational style of a lawyer who is as facile with his pen as he is eloquent with his tongue and who knows how to impart the dramatic quality to the human aspect of this social and economic problem. But he succumbs to the limitations imposed by his professional association with the case, when stating the issues between labor and the side he has been called upon to represent.

Thus, when he speaks of the clash between the union and the association over the effort of the former to protect its members from discrimination because of their activity in behalf of the union, he befogs the issue by the claim that under the preferential union system "the substitution of one union man for another" (p. 147) is but a "freedom of selection" which "the employer must enjoy to the utmost" (p. 147), because "discipline must be secured and maintained" (p. 134), and because "to turn over to a tribunal general review of the exercise of administrative power is to run industry by tribunals" (p. 147).

In giving this formulation to one of the most bitterly contested points between the two sides, the author has failed to bring out the contention of the union that the unlimited freedom of the employer to substitute one union man for another may be as detrimental to the union as substituting a non-union man for a union member, since not all union men are equally energetic or courageous in maintaining their rights especially since the union is obligated under the protocol to admit everybody to its membership. With the employer in full control of the shop, he has every worker at his mercy, for it is very easy for the employer to avoid the charge of discrimination against an employee on account of union activity by discharging him on the alleged ground of inefficiency or incompetence, which practice, in the absence of a tribunal with power of "general review of the exercise of administrative power," makes service on a price committee "worth a workman's job" to quote the language of a union official. Added to this is the fact that the union, under the protocol, gave up its right to strike as a means of redressing grievances, leaving a review by an impartial tribunal as the sole protection of the workman against arbitrary discrimination on the part of an employer. Even Mr. Cohen's former clients recognized the justice of this view, when the manufacturers association conceded to the union the right to strike under the agreement terminating the twelve weeks general strike of the summer of 1916 in return for the abolition of the right of review by an impartial tribunal.

The revival of the sweatshop evil, once believed to have been abolished, was the other cause which brought about the downfall of the protocol. The union accused the manufacturers of encouraging the multiplication of contractors and using them as a means of forcing down piece rates among their own employees (while discharging their most loyal members on the price committee on alleged grounds of inefficiency or incompetence) and then using these in turn to still further force down the pay of the contractors. Mr. Cohen emphasizes the employers' theory of the situation which places the burden of responsibility on the more enterprising of the workers who, having saved up a little money, take the initiative in starting a "social" shop (p. 94), so called because all the workers in the shop are his social equals and friends and are "only too ready to accept employment below union standards" (p. 94). He points out, however, that while "each [side] throws responsibility upon the other, both agree upon the fact of the existence of the evil and the prime and pressing necessity for its elimination" (p. 95). Hence his query "why not a joint remedy?"

His answer to this question is probably the most constructive contribution to the solution of the age-long problem of the relations of capital and labor, that the book contains. That in proposing the bold and far-reaching step, the author has not hesitated to follow deliberately in the footsteps of an English socialist and labor leader (J. Ramsey MacDonald) is but another indication of his broad-minded appreciation of the need of meeting new economic forces by new methods.

Briefly stated, the author advocates the creation of a Federal Industrial Commission composed of representatives of employers, the unions, and the public. The commission is to have the power to certify any agreement between employers and employees "voluntarily come to"; and, if such a voluntary agreement is made between a majority of the employers and a majority of

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the workers, the commission is to have power to make the terms of the agreement "binding upon all in the industry" (p. 226). This is to guarantee the majority "against the undermining of standards by unscrupulous competitors" (p. 228). As to the constitutionality of such an act, the author believes "the time is coming when this kind of legislation will be upheld."

These views of a lawyer who has prosecuted unions before the courts on behalf of employers and who has given special thought and study to the legal aspect of the labor question, are particularly interesting and encouraging to the economist seeking a constructive solution of the present bewildering chaos produced by the clash of industrial interests.

N. I. STONE.

The Longshoremen. By Charles B. Barnes. Russell Sage Foundation. (New York: Survey Associates, Inc. 1915. Pp. xx, 287, illus. \$2.00.)

In England considerable study has been made of the working conditions among dock laborers since the great strike of 1889. In the United States, however, there had been no intensive investigation of this important class of our laboring population before the present work. Mr. Barnes' study, based upon an investigation carried on under the direction of Pauline Goldmark, is confined principally to the longshoremen of New York, Brooklyn, and Hoboken. In the appendixes is found a discussion of certain aspects of the work in Boston, London, Liverpool, and Hamburg.

The longshoremen provide a fruitful subject for inquiry, since here we find a large group of workers suffering under the evils of defective social adjustment. The central problem of the longshoremen and the one which prompted the present investigation is the casual or irregular nature of employment in the occupation. There is a large oversupply of labor, hiring is uncertain and unsystematized, and periods of unemployment alternate with long periods of exhausting work, often lasting thirty or forty hours at a stretch. Deplorable consequences result from this state of affairs. While waiting for work the men are naturally attracted to the saloons; uncertain employment leads to shiftless habits, often in the course of time demoralizing the laborer and unfitting him for regular work. Casual work is

accompanied by low earning power thus causing a burden upon society through the necessity of charitable relief.

Although the analysis of the problem of casual employment is familiar to us from other studies, Mr. Barnes performs a valuable service in bringing to the attention of the community conditions existing in New York. Lack of statistics makes it impossible for him to give any exact statements as to the extent of irregularity of employment, but the material presented shows that it is exceedingly great, it being estimated that one third of the longshoremen of New York are constantly unemployed.

One chapter is devoted to the study of the risks of the trade, Here again the author is confronted by a dearth of statistics. Yet the hazardous nature of the work and the danger of overfatigue are explained, and an analysis of a number of typical cases of accidents leads to the conclusion that a considerable proportion of them were obviously preventable.

In the face of these unhealthy conditions it is pointed out that little or nothing has been done in New York to remedy them. Sporadic attempts have been made by the employers but with no success. The men themselves have been able to accomplish little. Some organization has existed among the longshoremen of New York for more than fifty years, and at times the unions have gained great strength temporarily. Bad management and internal discord have prevailed, however, and the men have never succeeded in getting formal recognition or a signed wage scale. Moreover, the state has done practically nothing either in providing for the regularization and better distribution of work or for the protection of longshoremen against accidents.

In England and Germany the problems here presented have been seriously attacked. London, Liverpool, and Hamburg have all adopted schemes for regularizing employment, the plan recently put in practice in Liverpool, providing for clearing houses and the pooling of the labor supply for hiring, being especially noteworthy. Likewise in these ports stringent regulations are in force for the prevention of accidents. Accounts of these foreign schemes and the provisions of the accident regulations are set forth in detail in the large appendixes to the work.

The author exhibits a sympathetic appreciation of the status of the longshoremen, but his treatment of their problem is

entirely impartial, and throughout the book there is apparent a painstaking search after the facts, obtained mostly by means of cross-examinations, interviews, and direct observation. In the presentation of the material, however, greater skill might have been employed. For example, the chapter dealing with the risks of the trade should logically follow the chapter giving a detailed description of the nature of the work. There would seem to be no reason for breaking the sequence by several chapters dealing with the history of organization in the trade. Perhaps also our remissness in handling the longshoremen's problems in this country could have been more effectively presented if the possibility of solving them had been demonstrated by concrete illustrations of the progress made in Europe, considered in close juxtaposition to the statements of the problems themselves instead of being relegated to detached essays in the appendixes.

But although the facts in regard to this trade might have been marshalled somewhat more forcibly through a better arrangement of the material, Mr. Barnes' study provides us with an enlightening and much needed contribution concerning a very defective phase of our social organization. It is to be hoped that this study will provide the starting point for the collection of statistics in regard to this trade and for some positive scheme

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of improvement.

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Laws of the several states arranged alphabetically; 54 parts in one volume.

Tourret, J. Le salaire minimum des ouvrières a domicile: loi du 10 juillet 1915. (Paris: Sirey. 1916.)

Books and periodicals on accident and disease prevention in industry in the library of the United States Bureau of Labor Statistics. (Washington: Gov. Pr. Off. 1916. Pp. 23.)

Sanitary standards for the felt hatting industry. (Trenton, N. J.: Dept. of Labor. 1915. Pp. 94.)

## Money, Prices, Credit, and Banking

American Banking. H. PARKER WILLIS. (Chicago: LaSalle Extension University. 1916. Pp. xi, 361. \$2.00.)

The Federal Reserve. By H. PARKER WILLIS. (New York: Doubleday, Page, and Company. 1915. Pp. xii, 342. \$1.00.)

Although both of these volumes were written as parts of "libraries" primarily intended for readers outside of academic circles, they are well adapted to the needs of teachers, the former as a textbook in the principles of banking and the latter as material for supplementary reading. The author's wide experience in this field of finance, together with his intimate connection with the new system at its inauguration, enables him to write with unusual authority.

American Banking possesses to a small degree only the fault so common to works of this type, viz., an utterly inadequate treatment of a large range of topics. A wise selection of subjects has been made and in most instances they have been given sufficiently adequate treatment for a clear understanding of the underlying principles. The book begins with two short chapters dealing respectively with the functions of a bank and the various

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types of banking institutions. The author then proceeds to treat in an original and effective manner such special topics as loans, deposits, domestic and foreign exchange, note issue, and clearing houses. Since most of the last-named chapter is devoted to a description of clearing checks, its more logical place is with the chapters on deposits and domestic exchange. Moreover, the chapter on reserves is separated from the other chapters dealing with specific features of banking operations by a discussion of the more general subject of bank organization and administration, and is followed by a general survey of banking operations as revealed in the bank statement. It has been the experience of the reviewer that a better understanding of the whole subject is secured if the general survey of bank organization, administration and operation is completed before an intensive study is made of the more important operations. A history of American banking, entirely inadequate for teaching purposes but probably sufficient for the primary purpose for which the book is intended, sums up our experience with various types of banks, special attention being given to the national banking act and the weaknesses developed under its operation.

With the exception of a brief chapter on foreign banking, the rest of the book is devoted to a detailed treatment of the federal reserve system. For a popular treatise on the principles of banking altogether too much space is given to the detailed history of the act, including the provisions of the original Owen and Glass bills and the various steps in the progress of the project through Congress. In two chapters entitled "The federal reserve system in operation" and "Problems of American banking," is discussed the operation of various features of the system, together with their probable effect upon business. to be little logical ground, however, for the division of the subjectmatter and its presentation under these separate captions. Owing to the fact that all of the special topics such as loans, deposits, note issue, etc., were already discussed in the light of the provisions of the new act, a further discussion dealing with the system as a whole has necessitated considerable repetition. As the new legislation becomes a well-established and inseparable part of our banking machinery there will be less need of an extended treatment of its provisions as something apart from the rest of the system.

The Federal Reserve was written "in the hope that a comprehensible account of a great constructive statute may enable the general reader to form a correct opinion of it, and so to determine his attitude toward it in the future, as well as to furnish him with a true idea of the system of banking under which his business affairs are carried on." The author leaves no doubt as to what he considers a "correct opinion," for he appears throughout the discussion in the role of staunch defender of the new legislation in all of its many provisions. Since the appeal of the book is primarily to the "general reader," the treatment of the main theme is very properly prefaced by an introductory chapter on the development of banking in the United States and a brief explanation of the cardinal banking functions. former would have been more effective if it had been written with a stricter regard for the bearing of the early banking experience of the country upon the character of the present system. A chapter on the currency reform projects of the past twentyfive years, while more appropriate in a volume devoted to a currency reform measure than to the work on banking in general, may tend to confuse the casual reader, whose sole ambition is to gain an understanding of the provisions of the present measure. Succeeding chapters give a history of the present act (including a detailed defense against the charge of plagiarism made by the proponents of the Aldrich plan), describe the work of the organization committee, and the part played by the partially organized system in the crisis of 1914. In a chapter on the system as a whole the regional plan is defended vigorously as against a central bank system. Two excellent chapters deal with the composition and duties of the Federal Reserve Board and the organization and functions of a regional bank. The latter half of the book is given to a treatment of such topics as discounts and commercial paper, clearing checks, note issue, possibilities of a unification of our whole banking system, the financing of foreign trade and the fiscal operations of the regional banks. The great array of details is handled with great skill, the larger significance of the various provisions being given proper emphasis. An appendix contains a useful abridgment of the summary of the federal reserve act published by the National Association of Credit Men.

G. W. DOWRIE.

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#### NEW BOOKS

Anthonisz, J. O. Currency reform in the Straits Settlements. (London: J. Little & Co. 1915. Pp. 160. 3s. 6d.)

Bradbeer, W. W. Confederate and southern state currency; historical and financial data, biographical sketches, descriptions. (Mt. Vernon, N. Y.: W. W. Bradbeer, 165 N. Fulton Ave. 1916. Pp. 162. \$3.)

DUPLESSIS, F. Le crédit de banque en Allemagne et en France et notre avenir économique. (Paris: Berger-Levrault. 1915. 2 fr.)

EASTON, H. T. The work of a bank. (London: Effingham Wilson. 1916.)

Frame, A. J. Why state banks do not join the federal reserve system. (Waukesha, Wis.: Waukesha National Bank. 1916.)

LeRossignol, S. J. Notes on banking and political events in Jersey. (London: Trowbridge. 1915. 5s.)

Morrison, J. H. Money and a proper and just monetary system explained. (Weiser, Ind.: J. H. Morrison. 1916. Pp. 115. 25c.)

Phillips, C. A. Readings in money and banking. (New York: Macmillan. 1916.)

DE Rossi, B. C. L'ordinamento del credito fondiario in Europa e particolarmente in Italia. (Torino: Bocca. 1916. 101.)

Salèmes, J. Le moratorium, les banques et la reprise des affaires. (Paris: Fontemoing. 1916. 2 fr.)

Scott, W. A. Money and banking. Fifth edition, rewritten, rearranged, and enlarged. (New York: Holt. 1916. Pp. ix, 406. \$2.)

In the latest edition of his well-known text Professor Scott makes no attempt at a general revision. The part on banking has been largely brought down to date by a well-written section of 32 pages dealing with the federal reserve system. Minor amendments have been made in the discussion of the money market and elsewhere. No new material has been added to the subject of money. Nothing has been said about the recent important developments in foreign exchange. Statistical tables dealing with the production and coinage of the precious metals have not been advanced beyond 1899 where they rested in the previous edition.

In the reviewer's opinion the book would gain, not only by additional matter made available by recent experience, but also by a rearrangement of certain chapters and by considerable deletion within sections. The reviewer has always been puzzled about Professor Scott's reasons for divorcing the chapters on bimetallism (chs. 16, 17) from other phases of money by the interposition of all that he says on credit and banking. Much of the chapter dealing with the money market (ch. 15) could be combined with considerable advantage with earlier sections, such as that devoted to loans and dis-

counts. Improvements might also be suggested in the discussion of the quantity theory of money, now too brief and inadequate, and in the treatment of foreign banking systems, particularly the Canadian, now too much involved in historical detail.

While the instructor can bridge over the difficulties mentioned, the value of the book for teaching purposes would be greatly increased if it were given a thorough revision in line with the policies of recently constructed texts covering the same subject.

FRANK T. STOCKTON.

STOLL, O. The people's credit. (London: Nash. 1916. Pp. xii, 243. 5s.)

Subercaseaux, G. A common monetary unit for America. (Santiago: Imprenta Universitaria. 1915. Pp. 26.)

WITHERS, H. International finance. (London: Smith Elder. 1916. 3s. 6d.)

# Public Finance, Taxation, and Tariff

English Taxation 1640-1799. An Essay on Policy and Opinion. By WILLIAM KENNEDY. Series of the London School of Economics and Political Science, No. XXXIII. (London: G. Bell and Sons, Ltd. 1919. Pp. ix, 200. 7s. 6d.)

This essay is the result of an attempt to understand a very puzzling question—the rational grounds of English tax policy. The expectation that a key could be found in a study of the development of English parliamentary tax policy in the past, is the author's working hypothesis. Yet, he himself admits that, besides furnishing him with a useful hypothesis, his plan has hardly proved successful until he has got back to the period that preceded Pitt. Here in this earlier time, from the meeting of the Long Parliament in 1640 until the full burden of the Napoleonic wars began to weigh upon the nation, he finds much to explain present-day tendencies in throwing a disproportionate burden of taxation upon the wage-earning classes, and also much to help us understand present-day inconsistencies in the distribution of taxation in general.

The book differs from such standard works on taxation as Stephen Dowell's History of Taxation and Taxes or Sydney Buxton's Finance and Politics in that it does not pretend to record lists of tax enactments. In this sense it is not a history of English taxation from 1649-1799. Still less does this book belong, in any sense, to the class of the ordinary standard constitutional history, that seeks to trace the development of the tax-levying power of the government. The character of the book as well as the purpose of the author, is, however, aptly expressed in the subtitle: An Essay on Policy and Opinion. Dowell makes comparatively little attempt to bring out tendencies of taxation and none at all to explain them. The present author, on the other hand, although he makes some real contributions upon the interregnum and the direct taxes of the seventeenth century, where Dowell falls short, in the main concerns himself little with details of taxation but seeks rather to discover the policy of government as revealed in the records and as amplified and explained by the opinions and motives of those who have supported or opposed the various schemes of taxation that have from time to time won the support of an English parliament. Always, apparently, the question is uppermost in the author's mind: What lies behind the avowed policy of government?

The work is an important contribution, although in the present state of scholarship upon this subject, as the author admits, many of his conclusions can be accepted only as provisional. The great book on the "History of Taxation," that shall treat directly and exhaustively the many questions that are here only touched, that shall consider the great questions of distribution and of underlying political and social opinion with correlation of the results of work in other fields of social history—this book has not yet been written. And yet when the moment comes to undertake such a work, this little essay of less than 200 pages will not be forgotten.

BENJAMIN TERRY.

British Incomes and Property. The Application of Official Statistics to Economic Problems. By J. C. Stamp. Studies in Economics and Political Science. No. 47 in the Series of Monographs by Writers Connected with the London School of Economics and Political Science. (London: P. S. King and Son, Ltd. 1916. Pp. xvi, 538. 12s. 6d.)

The author of this work is of the Inland Revenue Department and brings to bear upon the problems treated an intimate practical knowledge of the statistics of the income tax and inhabited house duty. The work is largely statistical and its main purpose is to serve as a guide to the interpretation of the Inland Revenue Reports, the figures of which are based upon an intricate

legal code and have always presented formidable difficulties to the investigator.

As outlined by the author, there are three main practical aims of the monograph: first, to describe the subject-matter and to formulate definitions of all the "conventions" of the tax in such a way that their bearing upon statistical and economic investigation shall be clear; second, an attempt has been made to obtain historic continuity in the figures, and to furnish tables, based upon the official returns, which shall bridge the gaps or "breaks" caused by changes in the legal and administrative basis of assessment, so that a real comparability may exist between years widely separated; and, in the third place, the work cites many concrete illustrations of the practical difficulties connected with the use of these statistics for economic investigation, and points out where, in the judgment of the author, various statisticians and economists have erred, or, on the other hand, have most closely approximated the truth.

Though the author is a revenue official, he explicitly disclaims that the work is official or that it pretends to authority, or that he has even attempted to make it "readable" in the ordinary sense; rather, the attempt has been to provide a work useful for reference, and valuable in *conjunction* with current official reports, or in partial substitution for the older official tables.

The most lasting impression that this study makes upon the reader is that British tax and property statistics are very different from what they seem; in fact, that the presumption is that they never mean what they appear to mean, and that any use of them by the uninitiated is sure to result in erroneous or useless conclusions, or worse. Tax statistics are sui generis. Census and general registration details, and particulars of foreign trade can be schemed and, broadly speaking, are actually designed to serve purely statistical ends; but tax statistics are mere byproducts of a system designed, maintained, and modified on legal and administrative lines, with a view to its efficiency as an engine of taxation. Nowhere is there an attempt at statistical convenience or completeness. When we recall that, for many years, the income tax was considered a temporary expedient and hence not carefully systematized, that for a long time its administration was largely under local rather than central supervision, that frequent changes were made in the law without any attempt at

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statistical sequence, that terms got farther and farther away from their original connotations and became more and more technical, then we can easily understand that the statistics are full of pitfalls for the inexperienced and unwary.

The monograph impresses the reviewer as the careful and reliable work of one well prepared to do it and as a contribution to economic history well worth making, though it is probable that very few, other than a small number of English economists and statisticians who have made a long study of the same subject, are qualified to pass upon its accuracy throughout. The work will probably be used very little by laymen or by others than economists and sociologists, though it should prove of great value to the latter.

One could wish that it gave more conclusive answers to a number of the questions which it raises and which have been raised so many times before; among them, such questions as those relating to the distribution of income, the division of income and property into categories, the accuracy of this or that class of income or property as a test of capacity, the prosperity of agriculture, the amount of real unearned increment, the taxable capacity of Ireland, the influence of absenteeism, progressive and differential capacity of individual incomes, and many other economic and social questions. But at the outset the author warns that it is not his purpose to carry economic investigations to their final conclusions; that it is the aim to provide new or improved tools rather than to use them when made. This aim seems entirely worthy and to have been very successfully accomplished in this case. Despite this success, however, and despite the explanations of the author, most readers will have a lingering feeling that Barker's criticism of MacDougall has some relevancy in the present instance: "He seems to do a great deal of packing in preparation for a journey on which he never starts."

ROY G. BLAKEY.

University of Minnesota.

Das moderne Zollschutzsystem; seine wissenschaftlichen Befürworter und Gegner in Deutschland seit den siebziger Jahren des XIX. Jahrhunderts. By Fritz Mender. (Zurich: Art. Institut Orell Füssli. 1916. Pp. xviii, 232. 4.20 M.) Dr. Mender's book reviews systematically and concisely the controversy which for the past forty-five years has been waged

in Germany for and against her untrammelled participation in the commerce of the world. According to the author, one of the chief characteristics of recent German protective tariffs has been duties on agricultural products, and a scientific justification of such duties has formed the basis of modern German protectionist theory. Dr. Mender groups under five heads the various arguments which have been advanced recently by German economists relative to protection. He begins with a discussion of the basic relationship between national economy and world economy and with an analysis of the competitive strength of industrial versus agrarian states; he then takes up successively the problems of the effects of protection on the growth of population, on the preservation of agriculture, on the development of manufactures and on the establishment of "social peace." In each subdivision he presents the ideas of the advocates and of the opponents of protection as well as his own conclusions.

The author is right when he points out that the competition of Russian and of oversea grain in the last quarter of the nineteenth century stimulated both theoretical discussion and legislative enactments in Germany; but neither the passage of legal measures, in order to foster extractive and cultivating industries, nor theorizing on the subject of national self-sufficiency and of solidarity of all protected interests is as new as he makes it appear in his book. The writer ignores the French tariff legislation during the period of Restauration, the purposes of which legislation were similar to the objects of German and French laws promulgated after 1870; he also erroneously considers Henry Carey's protectionist theory identical with the theory of Friedrich List; it is true that the quotation from Carey which he gives justifies this view, but a more careful consideration of Carey's writings would have shown Dr. Mender that Carey has much more in common with modern German protectionists than with List.

This work is of particular interest at present, when international commercial relations of some European countries have been disruptured and when many leaders of thought and action in the United States seem to believe that in this lies our nation's greatest opportunity. Those who think that selling in distant markets confers extraordinary benefits and that everything should be done towards the encouragement of such selling may read with advantage many pages in Dr. Mender's book, in which he quotes

the statements of German agrarian protectionists; not because these statements can go unchallenged, but because they are the result of a searching inquiry into the fundamentals of national economic existence; although largely one-sided they reveal many valuable facts and present many interesting deductions, the consideration of which may dampen somewhat the neo-mercantilistic enthusiasm of those who see in foreign commercial expansion the main factors of national strength, prosperity and progress.

Dr. Mender's own position regarding free trade and protection is restated by him a number of times in the course of his discussion; he rejects protective duties both because they cannot remove the difficulties besetting industrial states and because by increasing the power of the capitalistic class they retard the realization of his ideal. This ideal is socialized production. Social control of industries will end the ruthless exploitation of labor and thus insure a steady growth of national consumption; foreign trade will continue because of the varied demands of our civilized existence, but the feverish search for new markets by overexpanding capitalism will cease and the whole national life will become more normal.

SIMON LITMAN.

University of Illinois.

#### NEW BOOKS

Adam, H. L'amortissement de la dette publique. (Paris: Giard & Brière. 1916. 6 fr.)

Bosc, H. L'impot sur le revenu. (Paris: Giard & Brière. 1916.)

Chu, C. The tariff problem in China. Columbia University studies in history, economics and public law, vol. LXXII, no. 2. (New York: Longmans. 1916. Pp. 191. \$1.50.)

CRAVEN, B. and R. O. EVERETT. Federal income tax; a plain presentation of the complex law for the benefit of the lawyer and the business man. (Raleigh, N. C.: Edwards & Broughton Prtg. Co. 1916. Pp. xii, 439. \$3.)

EINAUDI, L. Corso di scienza delle finanze. Third edition, revised. (Torino: Bocca. 1916. 151.)

The second edition of Einaudi's treatise, compiled by his pupil Necco, lately dead in battle, was published just before the war broke out. The new edition, for which the author alone claims responsibility, has a much changed appearance, due partly to the war itself.

First of all, the volume is shorter. The entire last book of the

second edition, "Finanza Straordinarià" is cut away and relegated to an independent work, "La finanza della guerra e delle opere In addition about a quarter of the volume has been removed, a little here and a little there, and new matter substituted, and almost every page of the treatise has undergone at least verbal changes. So the work is revised as well as shortened. The alterations of form and content show least in the introductory book I; to this part has been added a section on the public nature of the manufacture of arms and munitions. Book II and III of the old edition are now, however, combined into book II, dealing with the theory of taxation. From this book is now excluded almost an entire chapter on others' theories. The whole volume, it may be said, has gained in simplicity and directness by the reduction of all historical material and of the discussion of other economists' theories, since these matters could not be satisfactorily managed in the general treatise. Book III, now the final book, dealing with the Italian system of taxation, contains the chief additions of the revised volume, essentially, a chapter on the several new kinds of tax growing out of the war. These taxes the author expects to be permanent in Italy. Comprising exactly one half of the entire volume, this book is an authoritative analysis of the Italian tax system. As a whole, Einaudi's treatise is a notable product of contemporary Italian economic scholarship.

R. F. FOERSTER.

Lecouturier, E. L'impot sur le revenu. Commentaire de la loi du 15 juillet 1914 et du décret du 15 janvier 1916. (Paris: Marchal & Godde. 1916.)

Munro, W. B. Principles and methods of municipal administration. (New York: The Macmillan Company. 1916. Pp. xi, 491. \$2.50.) While this volume is devoted in the main to questions of municipal organization and administration, it contains brief discussions of a variety of economic questions, such as water-supply finance, sewerage finance, the cost of public lighting, contracts with public lighting companies, public and private ownership of such companies, police expenditures, fire loss, and school finance. The last chapter, comprising 76 pages, devoted to the general question of municipal finance, contains, in addition to a summary of the facts of municipal revenue, expenditure and debt, and of new sources of revenue recently proposed, a useful account of administrative organization and practice in financial matters, and would serve as an excellent introduction to the subject for a student beginning the study of municipal finance. The descriptions of methods of assessing real estate and of budget-making are particularly good.

Some of the author's statements and interpretations are, however, open to question. It is certainly questionable whether high cost of government is the principal cause of high cost of living (p. 404); whether all municipal taxes are distributed throughout the community, as seems to be implied on the same page; and whether total revenues, including gross earnings, not "gross profits" (p. 406), of municipal enterprises furnish a satisfactory basis for calculating the relative importance of direct taxes as sources of municipal revenue in the United States, England and Germany (pp. 406-407). Available statistics do not support the statement (p. 408), "Throughout the United States today, however, the practice of putting both state and local taxes on the same thing is becoming more common." The proportion of state revenues coming from the same sources as local revenues has continuously declined from 1880 to 1913. The writer can find no basis for the statement (p. 412, note) that Rhode Island cities are required by law to publish their assessment lists. The city of Providence does not publish such a list. The Oregon law of 1910 was repealed in 1912 and will not, therefore, furnish an object lesson in connection with local option in taxation (p. 481).

Perks, F. Taxation by valuation and the evils thereof. (London: Doherty. 1916. Pp. 163. 2s.)

Pigou, A. C. The economy and finance of the war. Being a discussion of the real costs of the war and the way in which they should be met. (London: Dent. 1916. Pp. 96. 1s.)

Sanders, W. The practice and law of excess profits duty. (London: Gee. 1916. Pp. 89. 1s. 6d.)

SNELLING, W. E. Income-tax tables and guide to the deduction of tax from dividends, interests, etc. (London: Pitman. 1915. Pp. 177. 5s.)

Tangorra, V. Trattato della scienza della financia. (Milan: Societa editrice libraria. 1915.)

WRIGHT, H. C. The American city. An outline of its development and functions. (Chicago: McClurg. 1916. Pp. 178. 50c.)

Though brief and highly condensed, this is on the whole a wellproportioned outline of municipal government, and should serve two distinct needs-of those desiring a compact introduction before making a detailed study of the subject, and of those who will find useful a handy summary of a field with which they are already familiar. Practically every topic within the scope of municipal organization and administration is at least touched upon, while special attention is devoted to two matters of large presentday concern: first, finances, including taxes and other sources of revenue, as well as expenditures and their control; and, second, municipal undertakings and their regulation, particularly lighting and transportation. As a rather minor criticism, it may be noticed that some of the statistics are not so recent as might be expected in a book published as late as February, 1916. A short but excellent bibliography concludes this commendable handbook.

C. F. A. CURRIER.

- Young, A. N. The single tax movement in the United States. (Princeton: Princeton Univ. Press. 1916. Pp. x, 340. \$1.50.)
- Customs tariff of Venezuela. Tariff series 33. (Washington: Bureau of Foreign and Domestic Commerce. 1916. 10c.) English translation of the official Spanish text of the law of 1915.
- The finance acts of 1915. An annotated reprint of the income tax provisions of the new acts. (London: Gee. 1916. 1s. 6d.)
- A handy guide for Ohio taxpayers. (Columbus, O.: State Board of Commerce. 1916. Pp. 55, 25c.)

# Population and Migration

NEW BOOKS

- Brend, W. A. Enquiry into the statistics of deaths from violence and unnatural causes in the United Kingdom. (London: Griffin,
- Bouvé, C. L. A treatise on the laws governing the exclusion and explusion of aliens in the United States. (Washington: Byrne. 1916. Pp. 918. \$6.50.)
- Crawford, R. The immigrant in St. Louis. A survey. Studies in social economics, vol. I, no. 2. (St. Louis: Missouri School of Social Economy. 1916. Pp. 108. 50c.)

An excellent example of a local monograph, and of the kind of "survey work" which should be undertaken in all of our larger American cities. Miss Crawford takes up in successive chapters the history of immigration to St. Louis, the housing of the immigrant in St. Louis, his occupation, education, naturalization, and relation to the city's institutions and its life generally. The final chapters are devoted to the work of religious and philanthropic agencies dealing with the immigrant in St. Louis. The monograph is clearly and interestingly written. Appended to it, and increasing its value, is a list of practical suggestions regarding the problems of which the monograph treats, forming a social program for St. Louis in her future dealing with the immigrant.

WARNE, F. J. The tide of immigration. (New York: Appleton. 1916.

# Social Problems and Reforms

NEW BOOKS

- Bonger, W. A. Criminality and economic conditions. from the French by HENRY P. HORTON. (Boston: Little, Brown. Pp. 706. \$5.50,)
- BRECKINRIDGE, S. P. and ABBOTT, E. The delinquent child and the home. (New York: Survey. 1916. \$2.)

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- Butterfield, K. L. A state system of argicultural education. Reprinted from the fifty-third annual report of the Massachusetts Agricultural College. Pub. Doc. 31, pt. 1. (Boston: State Board Agri. 1916. Pp. 19.)
- CROW, M. F. The American country girl. (New York: Stokes. 1916. Pp. 367. \$1.50.)
- DAVIS, P. Street land. (New York: Small, Maynard. 1916. Pp. 291. \$1.35.)
- DEVINE, E. T. and VAN KLEECK, M. Positions in social work, (New York: N. Y. School of Philanthropy, 1916. Pp. 55.)
- FLEMING, A. P. M. The principles of apprentice training; with special reference to the engineering industry. (New York: Longmans. 1916. \$1.25.)
- FORBUSH, W. B. Child study and child training. (New York: Scribners. 1916. Pp. 319. \$1.)
- FRANKEL, L. K. and Dublin, L. I. Community sickness survey, Rochester, N. Y. Reprint no. 326 from the Public Health Reports. (Washington: Gov. Prtg. Off. 1916. Pp. 16.)
- GILES, F. W. The campaign against syphilis. (London: King. 1916. 6d.)
- Gowin, E. B. and Wheatley, W. A. Occupations; a textbook in vocational guidance. (Boston: Ginn. 1916. Pp. 357. \$1.20.)
- HILYER, V. M. Child training; a system of education for the child under school age. (New York: Century. 1916. Pp. 299. \$1.)
- Holmes, A. Backward children. (Indianapolis: Bobbs-Merrill. 1916. Pp. 241. \$1.)
- Kirkpatrick, E. A. Fundamentals of sociology, with special emphasis upon community and educational problems. (Boston: Houghton Mifflin, 1916. Pp. x, 291. \$1.25.)
- Kürten, O. Einkommen und Miete, eine kritische Betrachtung. (Dresden: Zentralstelle für Wohnungsfürsorge. 1915. Pp. 29. 1 M.)
- McGuire, A. P. The boy scouts year book. (New York: Appleton. 1916. Pp. 243. \$1.50.)
- MAUREVERT, G. L'alcool contre la France. (Paris: Hachette. 1916. 3.50 fr.)
- MILLER, L. D. New York charities directory. A reference book for social service in or available for Greater New York. Twentyfifth edition. (New York: Charity Organization Society. 1916. Pp. 434.)
- O'LEARY, I. P. Department store occupations. (Cleveland, O.: Survey Committee of the Cleveland Foundation. 1916. Pp. 127.)

This book will be of interest mainly to those engaged in vocational guidance and trade instruction. It describes the kinds of work, with their relative advantages and disadvantages, of department stores, neighborhood stores, and five-and-ten-cent stores in Cleveland. There are brief chapters on working conditions and health; and on wages and regularity of employment. Perhaps the most instructive chapter is the one giving an analysis of jobs, showing in different departments the places of entrance into department store work and the lines of promotion. There is a chapter on vocational training for department store workers, dealing mainly with trade extension training rather than with trade preparation.

Parisot, L. Le problème des loyers et ses solutions. (Paris: Perrin. 1916.)

PAYNE, G. H. The child in human progress. (New York: Putnam. 1916. Pp. 400. \$2,50.)

PRITCHARD, M. T. Stories of thrift for young Americans. (New York: Scribner. 1916. Pp. 222. 60c.)

Schoff, H. K. The wayward child. (Indianapolis: Bobbs-Merrill. 1916. Pp. 274. \$1.)

Scott, W. Seventeen years in the underworld. (New York: Abingdon Press. 1916. Pp. 119. 55c.)

SINGERLAND, W. H. Child welfare work in California. (New York: Survey. 1916. Pp. 247. \$1.50.)

SMITH, E. Wage-earning women and their dependents. (London: Fabian Soc. 1916. Pp. 36. 1s.)

SMITH, E. J. Maternity and child welfare. A plea for the little ones. (London: King. 1s.)

TAYLOR, A. O., editor. Persistent public problems. (New York: Survey. 1916. Pp. 393. \$2.10.)

TAYLOR, G. R. Satellite cities; a study of industrial suburbs. (New York: Appleton. 1915. Pp. 333. \$1.50.)

"Congestion, with all that it means in choked streets, dark work rooms and high taxes, has been forcing factories to our city limits and beyond. To direct attention to this process and particularly to its civic consequences is the purpose of this book. . . . These pages are not an attempt to solve the resulting complex problems. They are an effort to set forth definite facts from typical communities where these problems and the general situation which embodies them are seen in bold outline."

With this foreword the author aptly describes the content of his volume. The chapters were originally written as articles for The Survey with the substance and style which characterize the skillful reporter. The first chapter gives several examples of the er

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industrial cities of the United States which are surrounded by "satellite" industrial communities. The famous Pullman example of paternalism is described, in its past and present civic bearing, in chapter II. A "parenthetical" chapter by Jane Addams on Pullman and its lesson concerning human relationships is more philosophical in character. Other chapters deal concretely with the civic and general social problems of the "satellites" of Cincinnati, St. Louis, and Birmingham, and two full chapters are devoted to the mistakes of Gary. The appendix containing the reactions of eight well-known writers upon city planning and housing constitutes a unique supplement and materially adds to the value of the book.

This is not a work in systematic science. The collected material is not deeply analyzed or compared. The observations and other presentation represent, however, a degree of breadth of outlook which has not characterized the few preceding studies in this field. The book is suggestive and certain chapters will prove valuable as supplementary reading in courses on problems of labor or housing.

JAMES FORD.

- Towne, E. T. Social problems. A study of present-day social conditions. (New York: Macmillan. 1916. Pp. xviii, 406. \$1.)
- Wunder, C. The anti-prohibition manual. Second edition. (Cincinnati: National Wholesale Liquor Dealers Assoc. 1916. Pp. 122. 10c.)
- Hospital social service; A selected bibliography. Bull. no. 17. (New York; Russell Sage Foundation Library, 1916, Pp. 3.)
- Report of the commission on probation relative to the juvenile law. (Boston: Senate No. 330. 1916. Pp. 43.)

### Insurance and Pensions

### NEW BOOKS

- Glass, W. M. The law of workmen's compensation. (Rochester, N. Y.: Lawyers Coöp, Pub. Co. 1916. Pp. 566. \$5.)
- GLIDDEN, J. S. Analytic system for the measurement of relative fire hazard; an explanation. (Chicago: Jay S. Glidden. 1916. Pp. 139.)
- HANNAN, W. E. Mothers' pension legislation in New York and other states. (Albany: N. Y. State Library. 1916.)
- Maxwell, H. Z. A handbook of the Pennsylvania workmen's compensation act of 1915, containing a digest, full text of the associated acts, rulings of the board and a comprehensive index. (Philadelphia: Ware Bros. Co. 1916. Pp. 104. 25c.)
- RICHARDS, E. G. The experience grading and rating schedule, designed to be a United States standard for measuring fire insurance costs

based upon combined experience averages. (New York: Nat. Board of Fire Underwriters. 1915. Pp. 104.)

Sherman, P. T. Advantages and disadvantages of insurance in the New York state insurance fund. Revised. (New York: G. I. Wilson & Sons. 1916. Pp. 16. 25c.)

Proceedings of the second annual session of the National Association of Industrial Accident Boards and Commissions, Seattle, Sept. 30-Oct 2, 1915. (Madison, Wis.: L. A. Tarrell, secretary. 1916. Pp. 270.)

Tenth annual report of the president and of the treasurer of the Carnegie Foundation for the Advancement of Teaching. (New York: The Foundation, 576 Fifth Ave. 1916. Pp. 141.)

Part III has chapters on clergy pension funds, industrial pensions, pensions for public school teachers, and for university professors.

Massachusetts workmen's compensation act and decisions of the industrial accident board, with references to negligence and compensation cases annotated. New York workmen's compensation act and decisions of the state industrial commission, with references to negligence and compensation cases annotated. New Jersey workmen's compensation act and decisions of the courts of common pleas, with references to negligence and compensation cases annotated. Indiana workmen's compensation act and decisions of the industrial board, with references to negligence and compensation cases annotated. (Chicago: Callaghan. 1915. Pp. 1183-1308; 1183-1289; 1183-1264; 1183-1237.)

# Pauperism and Charities

Old Age Poverty in Greenwich Village. By Mabel Louise Nassau. Greenwich House Series, No. 61. (New York: Fleming H. Revell Company. 1915. Pp. 105.)

This study is largely a description of one hundred people over sixty years of age, living in a section of New York City known as Greenwich Village, who are near or under the actual poverty line. As no statistics compiled from one hundred people would justify elaborate statistical analysis not many are used, the description being supplemented by a few generalizations. Among the one hundred cases studied the economic status varies from self-support to that of complete dependence on charity. The composite picture of old age created is indeed as the author points out a travesty on Browning's words:

"Grow old along with me,
The best is yet to be
The last of life, for which the first was made!"

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It is the author's opinion that old-age dependency is often if not well nigh always not so much the fault of individuals as the fault of our social system. This is emphasized in a discussion of saving for old age when the author quotes approvingly the following from I. M. Rubinow's Social Insurance: "Special saving for old age would only be possible through a persistent, systematic and obstinate disregard of the needs of the workingman's family, which would make the preaching of such special savings a decidedly immoral force."

After reviewing in brief space the present methods of handling old-age dependency in the United States the author concludes that neither private charity in the home nor putting the aged into big institutions is a satisfactory way of solving the old-The final chapter is devoted to a discussion of age problem. the need of public provision for aged people in America. From an examination of the arguments for and against social-insurance and pension systems Miss Nassau concludes that "So far, no one system of provision for old age seems entirely satisfactory; all pension systems and all insurance systems seem to fail in some But perhaps some combination or modification of these systems will be discovered." Obviously the author feels that, even were it not possible to find some such combination, public provision for old-age dependency would be preferable to the existing methods of meeting the problem. One can not help but ask himself, in reviewing Miss Nassau's charges against the present methods, whether their short-comings are inherent or only incidental. The reviewer regrets that the author did not stress with more force the fact that pensions (and he would add noncontributory social insurance) are not "a remedy for low wagesthey are merely palliations while wages are low."

FRANK D. WATSON.

Haverford College.

### Socialism and Co-operative Enterprises

#### NEW BOOKS

- KIEFL, F. X. Die Theorien des modernen Sozialismus über den Ursprung des Christentums. (Munich: J. Köfel. 1916. Pp. 222. 3 M.)
- Madsen, A. W. The state as manufacturer and trader. A criticism based on economic, industrial and fiscal results from government tobacco monopolies. (London: Unwin. 1916. 7s. 6d.)

- Russell, H. A. The new socialism. (New York: Shakespeare Press. 1916. Pp. 111. 64c.)
- Walling, W. E. and others. The socialism of to-day. A source-book of the present position and recent development of the Socialist and Labor parties in all countries, consisting mainly of original documents. (New York: Holt. 1916. Pp. xvi, 642. \$1.60.)

## Statistics and Its Methods

### NEW BOOKS

- Bowley, A. L. An elementary manual of statistics. New edition. (London: Macdonald & Evans. 1915. 5s.)
- Statistical year-book of the Province of Quebec. Second year. (Quebec: Provincial Secretary's Department, Bureau of Statistics. 1915. Pp. 675, \$1.)
- Summary of Commonwealth production statistics, for the years 1903 to 1913. (Melbourne: Bureau of Census & Statistics. 1916. Pp. 167.)
- The official year book of New South Wales, 1914. (Sydney: J. B. Trivett, Government Statistician. 1915. Pp. 1010. 2s. 6d.)

### DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

THE NORTH CAROLINA CREDIT UNION. The credit union law passed by the North Carolina legislature for the promotion, organization, and supervision of farmers' cooperative banks was designed to meet a need for short time credit which is especially common to all states in the cotton belt. A brief survey of the cost of credit will show the necessity for creating separate credit facilities for the farmers in this state as in Europe and Canada.

According to the reports of bankers in 54 cotton producing counties in North Carolina, farmers are reported to have received an advance of \$29,150,742 from merchants in the form of supplies for growing one cotton crop, or an average of 58 per cent of its total value. These data were obtained through a survey which was made in cooperation with the Office of Markets, United States Department of Agriculture. Such book credit costs on an average 19.2 per cent. If these accounts as a whole run for six months farmers have to pay at the rate of 19.2 per cent for six months or 38.4 per cent per year for the credit with which they obtain their supplies. The total cost of this supply store credit at this rate for producing one cotton crop alone would be \$5,553,213. At the legal rate of interest of 6 per cent this credit would have cost \$874,522. Cotton farmers would have saved \$4,678,691 if agriculture had as good a system of credit as other lines of business in this state. No business can prosper and buy credit at such prices. A business which begins on this basis is beaten at the start. If this amount, in round numbers \$5,000,000, were saved, it would be an income of 5 per cent on a new land value of \$100,000,000 which would be added to the value of the land of the cotton counties of North Carolina alone.

Unorganized farmers generally have to depend upon one agency for credit. On the other hand, a corporation doing business on a large scale is able to borrow from any one of a number of financial institutions. The same corporation may be able to secure credit in Kansas City, Chicago, or New York, in fact wherever the interest rates are cheapest. The local character of the individual farmer's business and security so restricts his borrowing power that either he is not able to borrow at all; or he has to pay such a high rate that it does not pay him to borrow the use of capital; or, what is still worse, he may so run into debt for supplies for growing a crop that he is tied up in its sale. He is not free to organize an efficient system in his own behalf for the economical distribution of the products he

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produces. With net profits eaten up by the high cost of credit a farmer has no encouragement to invest new capital in the improvement of lands. As a result, the value of land has remained low and its improvement slow in the South.

The movement of funds at present is towards the large trade centers. This drains the rural districts of capital and makes it cheaper for tradesmen in the cities who can get credit at a lower price to take the crop off the hands of the farmer as soon as it is harvested. and finance its immediate distribution and sale or its storage until prices are favorable. It is hoped that the Credit Union, together with the National Farm Loan Association, will stem the stream of credit that moves away from the country to the city, keep in the country what funds are there, and turn the current of cheaper credit from the cities to the rural districts for the development of country enterprise. One banker stated to the author; "Your Credit Union provides the machinery for getting credit into the country which we need. We have plenty of funds to loan but no way of getting them out to farmers. Your Credit Committee, which passes on the sufficiency of the security offered by its members, is just what we want to put us in touch with the credit needs of a country neighborhood."

The Credit Union, as authorized by the last North Carolina legislature, is a society to encourage saving money and its expenditure for productive purposes. A credit union will only lend to its members for the purpose of increasing production. Loans for mere comforts or luxuries are debarred. The loan must be spent for something which will help repayment. A farmers' credit union thus becomes a society to promote agriculture. Either from savings deposited in the credit union or from funds borrowed by the credit union, farmers should be able to borrow the necessary funds with which to buy supplies as cheaply as those in any line of business. To illustrate, one credit union reports, in buying 114 tons of fertilizer for its members, a saving of \$667.73, over what it would have had to pay had the members bought on time in small separate lots.

Between December 1, 1915, and March 15, 1916, seven credit unions were organized by the Division of Markets and Rural Organization of the North Carolina Agricultural Experiment Station and Extension Service. Their progress is indicated by the following monthly financial statement, as on June 30, 1916:

A credit union like a savings bank helps people to save. Deposits may be received from both members and non-members. Four per

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Lowe

Name	Date opened	Mem- bers	Depos- itors	Payments on shares	Deposits	Loans		Borrow- ed from banks	Cash in banks	Total resour- ces
Lowe's Grove Sharon Creek .	Feb. 15 March 16 March 17 Feb. 16	62 26 55 48 38 22 26	11 24 3 5 8 2 2	\$ 476.60 255.25 248.80 272.75 826.00 120.00 245.25	\$ 283.88 501.27 221.00 484.70 121.50 200.00 50.75	\$1,940.00 *1,594.25 \$1,125.00 464.40 215.00 885.00	15 16 14 8 5 8	\$1,155.00 *1,127.42 630.00	\$ 39.08 3.09 15.54 294.82 245.75 74.85 811.00	\$2,026.12 *1,600.67 1,162.62 772.09 465.15 442.45 303.16
Total, June .	-	267	50	\$1,944.45	\$1,863.10	\$5,723.65	66	\$3,017.42	978.79	\$6,772.26
Total, May .		266	49	\$1,893.05	\$2,225.35	\$5,249.04	55	\$2,782.42	\$1,223.90	\$6,646.55
Total, April .		252	38	\$1,763.20	\$1,654.68	\$3,203.05	35	\$1,290.00	\$1,597.80	\$4,853.70
Total, March		201	29	\$1,133.25	\$959.76	\$940.00	8	\$100.00	\$1,299.78	\$2,264.89

\*Of this amount \$817.42 was borrowed 'from a bank upon the approval of the Credit Committee without the endorsement of the officers, that is to say the Credit Union assumed no official responsibility for this amount.

cent interest is paid on deposits. Unlike a bank a credit union limits its loans to members and only grants credit to them for productive purposes.

Unlike a bank a credit union can operate to better advantage on a small scale. One credit union has been organized where there had been some talk of establishing a commercial bank. A commercial bank has greater expenses for cashier, clerks, and building. The treasurers of the North Carolina credit unions have generally accepted the extra work involved as a part of their school or other duties as a means of teaching the practice of cooperation and of serving the community. The treasurer probably would not give on an average more than two or three hours a week. No building is required. A bank operates for the profit of a relatively small number of investors who own its stock. A credit union, like a building and loan society, gives credit to borrowers at cost. The dividends of a credit union are limited to 6 per cent. It is primarily a mutual society of borrowers and depositors. As cooperative marketing associations affect the prices received by farmers for their products, so will a savings society, which is run not primarily in the interest of the investors but in behalf of the borrowers, affect the rate of interest charged. The rate charged borrowers by the North Carolina credit unions for interest is 6 per cent, the rate charged by supply stores for book credit averages 38.4 per cent, and the rate of banks 8.5 per cent 1 for short time credit. The handlers of commodities and funds are not colorless and impotent agents in their effect upon prices, as postulated by supply-and-demand theorists.

Men, women, boys and girls, may become stockholders or depositors of a credit union. The par value of a share is usually made \$10, but may be any amount not to exceed \$25. Minors are permitted to pay

According to reports received from the demonstration agents of the state,

for their shares in instalments of 25 cents per month and adults in instalments of \$2.50 semi-annually.

The function of a credit union is to be sharply distinguished from that of a national farm loan association or land mortgage association as authorized by the federal farm loan act of Congress. A national farm loan association lends only for a minimum of five years and a maximum of forty years, the credit union preferably for not longer than a year. The National Farm Loan Association lends for permanent investment in the purchasing, equipment, and improvement of land only to the farmers who are to cultivate it. A credit union lends primarily for financing the operation of a farm between one year's harvest season and another. They both may lend for equipment and fertilizer, but loans for equipment and supplies made by a national farm loan association would be for starting a farm and for its operation during the first year, while the credit union would finance the operation of a farm for off years. Most of the loans made by the North Carolina credit unions have been for fertilizer. It would be needless for a farmer to borrow a hundred dollars from a national farm loan association for five years to buy fertilizer or farm machinery which he might expect to be able to pay for in six months or a year.

A farmer in the South, who should borrow enough to buy land and to finance the operation of the farm for the first year, might be able to get along all right for that year and as long thereafter as crops should be good and prices paying. But if in an off year he should fall behind and should have to resort to supply store credit he might then get deeper and deeper into debt unless the credit of his national farm loan association should be supplemented by that of a credit union.

Two results of far-reaching importance should follow from a general introduction of credit unions. (1) Farmers should be able to buy all farm supplies in large quantities as manufacturers do and get the benefit of what is known as a quantity price, that is, a lower price for large purchases than for small ones. (2) If the farmer can get credit as cheap as the middleman, he can afford to hold and dispose of his own products throughout the year to secure a uniform distribution and prevent the price depression which large early sales have forced upon him.

North Carolina has the distinction of being the only state in the United States that is officially carrying on an educational campaign to promote and organize, as well as incorporate, credit unions. Action through organization is so difficult for the sparsely settled American

farmers that little may be expected from federal and state laws without the necessary educational machinery to put them in operation. In this respect the North Carolina law differs from that of New York and Massachusetts, after which it is largely modeled. The enforcement of the law is put under the agricultural institutions of the state, which are presumably more in touch with farmers than are other state agencies. Organizers, credit literature, by-laws, and examiners are furnished to farmers free of cost as part of the educational system of the state.

WILLIAM R. CAMP.

North Carolina Agricultural Experiment Station.

ENLARGEMENT OF THE WELLAND CANAL. The Welland Canal is one of the most important of the numerous artificial waterways in Canada, inasmuch as it has occupied a strategic position in the development of traffic on the Great Lakes. It was built between the years 1824 and 1833, the main line covering a distance of about 25 miles in connecting Port Dalhousie on Lake Ontario with Port Colborne on Lake Eric. This was the very time that canal building was receiving the greatest attention in the United States: the Eric Canal was completed in 1825 and the main line of the state works of Pennsylvania in 1834. The Welland was a lock canal, and before its first important enlargement there was a depth of water on the sills of 101/4 feet. It was between the years 1872 and 1887 that the first important enlargement was accomplished which increased the depth of water on the sills to 14 feet-a depth which has been maintained until the present day. The size of freight boats on the Great Lakes has increased to such proportions, however, that the canal is now available for only a comparatively small number of commerce carriers. The necessity of modernizing the canal was so apparent that several years ago it was reported in one of the Canadian papers that 27 Canadian boards of trade had united in a memorial to the Dominion government urging an increase in the width and depth of the canal.

Accordingly, about two or three years ago, the Dominion government undertook to modernize the waterway at an approximate cost of \$50,000,000. Contracts were soon let for the entire work and construction was proceeding rapidly with the expectation that the canal would be completed in 1918. The European war is likely to delay the work to some extent. The plans provide for a new route for part of the distance. The width of the canal at the bottom will be 200 feet, at the water line 310 feet. All of the permanent struc-

tures are being installed so that the ultimate depth of the channel may be 30 feet, thus providing for the passage of freighters of the largest tonnage. For the present, however, there will be a depth of only 25 feet in the stretches between the locks notwithstanding a depth of water of 30 feet on the sills. There will be 7 locks, each 800 feet in length by 80 feet in breadth, with a lift of 46½ feet each. It is expected that grain moving from the great central cereal belt of the American continent to the Atlantic scaboard will form an important part of the traffic on the modernized waterway, although much coal and other bulky freight will pass westward. Tolls on the canal were abolished in 1903, and there is every reason for believing that the new canal will be free to all vessels of the United States and Canada alike.

A. L. B.

The Bureau of Foreign and Domestic Commerce has issued, as Special Agents Series No. 114, a volume on Navigation Laws, a comparative study of the principal features of the laws of the United States, Great Britain, Germany, Norway, France, and Japan, by Grosvenor M. Jones (Washington, 1916, pp. 190).

No. 119 of this series makes a study of Government Aid to Merchant Shipping covering subsidies, subventions, and other forms of state aid in the principal countries of the world, and is also prepared by Mr. Jones (Washington, 1916, pp. 265).

Bulletin No. 35 in the Miscellaneous Series of the federal Department of Commerce contains Export Trade Suggestions with extracts from reports of American consular officers and data from other sources dealing with the promotion of American trade (Washington, 1916, pp. 141.)

Bulletin No. 36 of the same series is a monograph on *The Shirt and Collar Industries* with a report on the cost of production (pp. 178). This contains data and information concerning imports and exports, factory equipment, and selling methods, prepared under the supervision of E. E. Pratt, chief of the bureau.

Senate Document No. 241 (Washington, 64 Cong., 1 Sess., 1916, pp. 80) treats of the Metric System in Export Trade, a Report to the International High Commission, prepared by Samuel W. Stratton, director of the Bureau of Standards.

The Department of the Interior has issued Regulations Governing Coal-Land Leases in the Territory of Alaska, Approved May 18, 1916, with Information Regarding Coal Lands (Washington, pp. 86).

The Bureau of the Census has published Cotton Products in the United States, Crop of 1915 (Washington, pp. 28).

Farmers' Bulletin of the federal Department of Agriculture for April 10, 1916, treats of Coöperative Live Stock Shipping Associations and is prepared by S. D. Doty and L. D. Hall (pp. 16).

A bulletin of the Vermont Department of Agriculture for December, 1915, contains a study of Farmers' Coöperative Corporations (pp. 48), made by Alexander E. Cance and Lorian P. Jefferson of the Massachusetts Agricultural College at Amherst. There is a convenient bibliography of two pages.

A report has been issued on a Market System of New York City and Open Markets Established in Manhattan (New York, 1915, pp. 121), by Marcus M. Marks, president of the Borough of Manhattan. The volume also contains reports on market conditions obtaining in Paris, London, Berlin, Hamburg, and Cologne.

The Farmers' Market Bulletin, issued by the North Carolina Agricultural Experiment Station (West Raleigh, vol. 3, Apr., 1916, pp. 32), presents statistical data in regard to prices of agricultural products including some comparison with those of New York and New Orleans.

### Corporations

The twelfth issue of Railway Statistics of the United States of America, for 1915, prepared by Slason Thompson for the Bureau of Railway News and Statistics has just been received (Chicago, Apr., 1916, pp. 147).

The Bureau of Railway Economics has issued Bulletin No. 92, Arguments for and Against Limitation of Length of Freight Trains (Washington, May, 1916, pp. 63).

A Study of Reading Street Car Service, by John P. Cox, and Preceding Reports of the Transportation Committee have been received from the Chamber of Commerce of Reading, Pa. (Jan., 1916, pp. 82).

The Baltimore Gas and Electric News, published monthly by the Consolidated Gas Electric Light and Power Company of Baltimore, has prepared an interesting pamphlet entitled American Gas Centenary, 1816-1916 (pp. 243-284).

The general manager of the Municipal Light Works Department of Pasadena, California has published a little pamphlet containing

A Brief History of the Municipal Light Plant of Pasadena (City Hall, pp. 12).

The question of public utility valuation is discussed in the decision of the Public Service Commission of Maryland filed March 8, 1916, in Investigation of the Rates and Charges, Property and Affairs of the Chesapeake and Potomac Telephone Company of Baltimore (pp. 104). Among the topics discussed are the general principles of valuation, construction overheads, working capital, and intangibles and non-physical values. Several pages deal with promoters' remuneration.

The subject of valuation is also treated in a paper read by Mr. Bion J. Arnold before the thirty-fourth annual convention of the American Electric Railway Association in San Francisco, October 7, 1915, entitled Foundation Principles of Utility Valuation with Special Application to Resettlement Plans. To this the author has added a discussion of depreciation of overhead charges and a glossary of terms (American Electric Railway Association, 8 West 40th St., New York, 1916, pp. 53).

Public utility reports have been received as follows:

Kansas Railroad and Public Utilities Law as it concerns the Public Utilities Commission, compiled by H. O. Caster, attorney for the commission (Topeka, 1915, pp. 192).

First Annual Report of the Public Utilities Commission of Maine, 1915 (Augusta, pp. 445).

Thirty-first Annual Report of the Board of Gas and Electric Light Commissioners of Massachusetts, 1915 (Boston, pp. 321, 493).

Thirty-first Annual Report of the Railroad and Warehouse Commission of Minnesota, 1915 (St. Paul, pp. 432).

Fourth Annual Report of the Public Utilities Commission of the State of Rhode Island for the year ending December 31, 1915 (Providence, pp. 180, xii).

#### Labor

Among recent bulletins of the federal Bureau of Labor Statistics are: No. 187, Wages and Hours of Labor in the Men's Clothing Industry, 1911 to 1914 (pp. 130). The report is based on returns covering about 25,000 employees.

No. 188, Report of British Departmental Committee on the Danger in the Use of Lead in the Painting of Buildings (pp. 207). The full text of the report is here reproduced.

No. 190, Wages and Hours of Labor in the Cotton, Woolen, and Silk Industries, 1907 to 1914 (pp. 241).

The final report of the Commission on Industrial Relations (Walsh Report) has been reprinted as Senate Document No. 415 (64 Cong., 1 Sess.).

Hearings before the House Committee on Labor, held March 30-April 4, 1916, on the Method of Directing the Work of Government Employees has been printed. These hearings dealt specifically with efforts to introduce scientific management into government shops. Of special interest is the testimony illustrated by charts relating to work at the Watertown Arsenal.

There has also been printed as House Report No. 698 (64 Cong., 1 Sess.) the report of the Committee on Labor on the Method of Directing the Work of Government Employees (pp. 47).

From Miss Josephine Goldmark, publication secretary of the National Consumers' League, has been received Brief for Defendant in Error in the case of Franklin O. Bunting vs. the state of Oregon before the Supreme Court of the United States, October term, 1915. The brief was prepared by Felix Frankfurter, counsel for the state of Oregon, assisted by Miss Goldmark (New York, National Consumers' League, pp. xiii, 984). This brief is an exhaustive treatise on the dangers of long hours and the evil effects of fatigue. Chapters deal with benefits of short hours, economic aspect of reducing hours, and historical progress of the shorter day. The National Consumers' League has reprinted the brief under the title The Case for the Shorter Workday.

The federal Bureau of Mines has issued a bulletin on Coal-Mine Fatalities in the United States, 1870-1914, with Statistics of Coal, Production, Labor, and Mining Methods, by States and Calendar Years, prepared by Albert H. Fay (Washington, 1916, pp. 370). This contains statistical tables running back to 1839 with more detailed treatment since 1870. The volume is illustrated with charts and maps and there is a brief treatment of the statistical methods involved in a study of this character. The same bureau has compiled also Coal-Mine Fatalities in the United States, 1915 (pp. 80).

Bulletin No. 16 of the Industrial Accident Board of Massachusetts contains a Report of Cases under the Workmen's Compensation Act Determined on Appeal by the Supreme Judicial Court, Dec. 1, 1915, to March 7, 1916 (pp. 76).

Bulletin No. 75 of the Industrial Commission of the Department of Labor of New York deals with Statistics of Industrial Accidents, 1914 (Albany, pp. 77).

The Industrial Commission of Ohio in bulletin for March 1, 1916 (vol. 3, no. 1), compiles Industrial Accidents in Ohio, January 1, 1914, to June 30, 1915 (pp. 281). This report is the third in a series of general accident reports published by this commission. It contains data covering 100,000 industrial accidents.

Further pamphlets on unemployment in addition to those noted in the June number (pp. 403-408) are:

Report of the Mayor's Committee on Unemployment (New York, Jan., 1916, pp. 109), which summarizes the results of various investigations, the relief measures undertaken, and a program for dealing with unemployment. In this latter chapter there is discussion of public employment exchanges, regularizing the demand for labor, and unemployment insurance.

Unemployment, A New Method of Gathering Statistics (Boston. State Board of Labor and Industries, Apr., 1916, pp. 13). This is a report of the sub-committee of the relief agencies' committee of the Massachusetts State Committee on Unemployment (Boston, Apr., 1916, pp. 13). The object of the inquiry is to expedite the speedy compilation of statistics when unemployment is a vital problem.

Eleventh Biennial Report of the Bureau of Labor, of New Hampshire, Part I (Concord, pp. 96). There is a chapter on unemployment in New Hampshire based upon statistical data furnished by sccretaries of labor organizations. One of the tables deals with causes of idleness. Another chapter deals with accident reports with a classification according to the nature of accident and the causes of accidents.

The Labor Laws of Nevada have been compiled by W. E. Wallace, industrial commissioner (Carson City, pp. 47).

The Twenty-fourth Annual Report of the Bureau of Statistics and Information of Maryland for 1915 (Baltimore, pp. 55) has been received.

### Money, Prices, Credit, and Banking

The Federal Trade Commission has made a preliminary report on the *Investigation of the Price of Gasoline* (Washington, Apr. 10, 1916, pp. 15).

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Senate Report No. 144 (64 Cong., 1 Sess., Feb. 15, 1916, pp. 35) deals with Rural Credits.

The hearings before the federal House Committee on Rules on the Investigation of Usury Charges against Banks, held January 17 and 21, 1916, have been published in pamphlet form (Washington, pp. 48).

Special Agents Series No. 62 of the Department of Commerce, dealing with Foreign Credits, has been reprinted. This is a study of the credit problem in foreign trade development with a review of European methods of financing export shipments.

In a reprint from the New York Times Annual Financial Review for January, 1916, Andrew J. Frame, president of the Waukesha National Bank of Wisconsin, discusses Why Do Not the State Banks Join the Federal Reserve System? (pp. 8). Mr. Frame does not believe that rediscounting is a conservative practice.

The Mechanics and Metals National Bank of New York City has published a booklet on Check Collection through the Federal Reserve System (pp. 12).

The Federal Reserve Bank of Boston (53 State St.) has also published, in Letter No. 44, an explanation to member banks of Check Collections, which was put in operation after July 15, 1916.

State banking reports have been received as follows:

Report of the Bank Commissioner of Connecticut for the year ended September 30, 1915 (Hartford, pp. 567).

Annual Report of the Comptroller of Florida, Banking Department, December 31, 1915 (Tallahassee, pp. 66).

Twenty-seventh Annual Report of the Commissioner of the Banking Department of Michigan, 1915 (Lansing, pp. lxxxv, 616). This includes the decisions of the attorney general in regard to banking questions.

Tenth Biennial Report on Examinations of the State Banks and Trust Companies of Missouri, 1915 (Jefferson City, pp. lvi, 691).

Twenty-fourth Annual Report of the Secretary of the State Banking Board of Nebraska, 1915 (Lincoln, pp. xxvii, 403). The bank deposit guarantee law is still regarded as a success. The guarantee fund, however, is imperiled, it is believed, by the multiplication of banks and an oversupply of bank capital.

Annual Report of the Commissioner of Banking and Insurance

Relative to Building and Loan Associations of New Jersey, 1915 (Trenton, pp. 775). Here it is noted that foreclosures are far above the yearly average in New Jersey due to depressed business conditions.

Eighth Annual Report of the Department of Banks and Banking in Ohio for the year ending June 30, 1915 (Columbus, pp. xxx, 369). Note is made of the new jurisdiction of the banking department whereby private banks are brought under supervision. Mention is also made of the operations of the blue sky act.

Twentieth Annual Report of the Commissioner of Banking of Penn-

sylvania for the year 1914 (pp. 711).

Eighth Annual Report of the Bank Commissioner of Rhode Island Showing the Condition of State Banking Institutions, June 30, 1915 (Providence, pp. 271).

The Twenty-first Annual Report of the Commissioner of Banking

of Wisconsin for 1915 (Madison, 1916, pp. 449).

### Public Finance

The federal Bureau of Foreign and Domestic Commerce, in Tariff Series No. 33 gives schedules of the Customs Tariff of Venezuela (Washington, Apr., 1916, pp. 53).

Bulletin No. 564 of the New York Tax Reform Association (New York, 29 Broadway) deals with the Secured Debt Tax Law, 1916 (pp. 4); Bulletin No. 565, with Inheritance Tax Law Amendments in New York for the year 1916 (pp. 7); and Bulletin No. 566 presents a survey of Tax Legislation of New York, 1916.

In July, 1915, a conference was held by the Tax Commission of Arizona with the Board of Supervisors and County Assessors, at Flagstaff. A verbatim Report of the Conference has just been published (Phoenix, State Tax Commission of Arizona, Jesse L. Boyce, secretary, pp. 239).

Part I of the First Annual Report of the State Board of Taxes and Assessment of New Jersey for July 1 to October 31, 1915, has been published (Trenton, pp. 152). This new board takes the place of the Board of Equalization of Taxes and the State Board of Assessors. The report contains tax data for the entire year as well as a complete report for this four month period.

The State Tax Commission of Maryland has published the Separate

Report of Oscar Leser, member of the commission, which contains a plan for inter-county equalization of assessments and the collection of state taxes by apportionment to the political sub-divisions of the state (Baltimore, Feb., 1916, pp. 39). This paper is discussed in the April issue of the Bulletin of the National Tax Association.

The Report of the Joint Legislative Committee on Taxation of the State of New York (Albany, pp. 295) transmitted to the legis-lature February 14, 1916, has an exhaustive treatment of the failure of the personal property tax giving the history of the tax in various states with summaries of the reports of previous commissions. There are also chapters on taxation of foreign corporations, the New York system of taxing manufactures, the listing system, and substitutes for the personal property tax.

The Proceedings of the First State Conference of Local Assessors and Sixth State Tax Conference, held at Albany, January 12-13, 1916, has been issued by the State Tax Department. This is the New York State Tax Bulletin, Vol. 1, No. 2 (Albany, May, 1916, pp. 226). Bulletin No. 3 is a Manual for Instruction of Assessors (pp. 84).

The New York State Tax Department has published a bulletin under date of February, 1916 (Albany, vol. 1, pp. 21), which deals with Questions Deposited by Assessors in the Question Box at the Conference, January 12 and 13, 1916, with Answers thereto.

Other tax reports which have recently appeared are:

Proceedings of the State Board of Equalization of Arizona (Phoenix, Board of Control of Arizona, pp. 61).

Proceedings of the First Annual Conference of the Idaho State Tax Association, held December 27-28, 1915, prepared under the supervision of Professor Howard T. Lewis, of the University of Idaho (Boise, pp. 125).

The Proceedings of the Fifth Biennial Conference Convention of the Tax Commission and the County Assessors of the State of Kansas, held November 30 and December 1, 1915 (Topeka, pp. 71). This contains a verbatim report.

The Fifth Annual Report of the New Hampshire State Tax Commission, 1915 (Concord, pp. 152). Reprints of new legislation are included and an address by William B. Fellows, secretary of the commission, at the ninth annual conference of the National Tax Association held at San Francisco, August 11, 1915. There is also

a digest of New Hampshire decisions on taxation (N. H. Reports, vols. 65-77).

The Annual Report of the State Tax Commission of New York for 1915 (Albany, pp. 52).

A Report of the Corporation Commission as a Board of State Tax Commissioners of North Carolina for 1915 (Raleigh, pp. xxii, 391). This contains the results of the new assessment of real estate.

First Annual Report of the South Carolina Tax Commission, 1916 (Columbia, pp. 167).

The Old Colony Trust Company has published a pamphlet on The Massachusetts Income Tax, recently amended, which applies special rates to the income from taxable securities (Boston, pp. 57). Reprints have also been made by the First National Bank of Boston (Income Tax of Massachusetts, pp. 23) and the National Shawmut Bank (Massachusetts Income Tax Law, pp. 39).

Professor O. C. Hormell, of Bowdoin College, in Bowdoin College Bulletin, Municipal Research Series No. 2, considers Budget-Making for Maine Towns, summarizing in detail the work of the Committee of Twelve in Brunswick, Maine. Charts and tables make a comparative analysis of expenditures of 11 Maine municipalities (Brunswick, Maine, Apr., 1916, pp. 21).

The Bureau of Municipal Research of Ohio has printed The Budget of the City of Dayton, 1916, as enacted by the city commission (pp. 60).

Baker, Watts & Co., of Baltimore, have published Municipal Obligations; A Practical Guide to Uniform and Economical Methods of Financing (pp. 59). There are chapters on methods of finance, the need for and purpose of a bond issue, road construction and highway improvement, serial bonds versus the sinking fund, optional bonds, the legal aspect of municipal bonds, and the right way to sell bonds.

The Bureau of Municipal Research of Philadelphia has compiled Comparative Salary Data (Philadelphia, Mar. 1, 1916, pp. 76; 75 cents). The data were obtained from the pay-rolls of 14 cities, 48 private establishments in Philadelphia, and salary standardizations of 7 American cities for 128 positions in municipal service.

The address of Otto H. Kahn on High Finance, delivered before the American Newspaper Publishers Association, April 27, 1916, New York, has been printed in pamphlet form (pp. 48). The Mechanics and Metals National Bank, of New York, has published a pamphlet on War Loans and War Finance (pp. 47). This contains an analysis of war costs and government indebtedness of Europe.

#### Insurance and Pensions

A paper read by Mr. Louis I. Dublin on Vital Statistics in Relation to Life Insurance before the second Pan American Scientific Congress has been published as a reprint (Metropolitan Life Insurance Company, New York, pp. 8).

The Insurance Society of New York has issued the following pamphlets: Subrogation, by William H. Van Benschoten (pp. 26); The Agent-Authority of Agents and Officers of Company, by Frederick T. Case (pp. 15); Abandonment, Protection and Removal of Property, by Frederick B. Campbell (pp. 12); The Psychology of Loss Adjustments, by George R. Branson (pp. 11); and The Functions of a Claim Department, by E. F. Howell, Jr. (pp. 32).

#### PERIODICALS

The Review is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

## Theory

(Abstracts by W. M. Adriance)

Colson, C. La valeur scientifique et pratique de l'économie politique. Rev. Sci. Pol., Feb. 15, 1916.

Millis, H. A. Fetter's economic principles. Quart. Journ. Econ., May, 1916.

A temperate, fair-minded review of Professor Fetter's new book by one who is unable to accept many of its most fundamental positions.

Nicholson, J. S. Friedrich List; The prophet of the new Germany. Econ., Journ., Mar., 1916. Pp. 5.

A review of Karl Kumpmann's Friedrich List als Prophet des neuen Deutschland. In the light of the great war this recalling of the views of List as to German policy takes on a new interest.

PERRY, R. B. Economic value and moral value. Quart. Journ. Econ., 1916.
Pp. 43.

A closely reasoned study of the nature of value by one familiar with the literature of philosophy. The writer is of the opinion that no necessary conflict exists between those who emphasize the social aspects of value (Cooley, Anderson, et al.) and those who, like the Austrians and their American confrers find the genesis of value in the estimates and choices of individuals. The writer is logically to be classed with such men as Fetter and Fisher whose emphasis is upon the psychology of individuals living in society.

# Economic History, United States (Abstracts by E. L. Bogart)

Alvord, C. W. Virginia and the West; an interpretation. Miss. Valley Hist. Rev., June, 1916. Pp. 20.

The reason why Virginia supported the party of the American revolutionists was because the British ministry in 1774 annexed the land claimed by Virginia in the Northwest to the Province of Quebec and in other ways interfered with settlement and land speculation.

Alzamoba, I. The economic situation and possibilities of Peru. Econ. Wld., July, 1916. Pp. 2.

The author is a native of Peru.

Arwoop, M. J. The German settlers of Millheim (Texas) before the Civil War. Southwestern Hist. Quart., July, 1916. Pp. 7.

An account by the last survivor of a settlement made in 1857.

Barrett, C. A. Early farming in Umatilla county. Quart. Oregon Hist. Soc., Dec., 1915.

BOWMAN, I. The country of the shepherds. Geog. Rev., June, 1916. Pp. 24.

A very interesting account of the loftiest pastures in the world, in the Peruvian Andes, and of the shepherd folk.

BRYAN, J. D., and BOONE, J. Boone records. Register of Ky. State Hist. Soc., Jan., 1916.

Burgess, S. A. The Nauvoo charter. Journ. Hist., Jan., 1916.

A chapter in the history of Mormonism.

COOK, J. W. Life and labors of Hon, Adlai E. Stevenson. Journ. Ill. State Hist. Soc., July, 1915.

Cox O. E. The socialist party in Indiana. Ind. Mag. of Hist., June, 1916.
Pp. 37.

Covers the period from 1896 to date; largely biographical.

Cov, O. C. The last expedition of Josiah Gregg. Southwestern Hist. Quart., July, 1916. Pp. 9.

Gregg was the author of Commerce of the Pioneers; he died of starvation on an exploring trip to California in 1850.

CRANE, V. W. The Tennessee river as the road to Carolina: the beginnings of exploration and trade. Miss. Valley Hist. Rev., June, 1916. Pp. 16. An account of the French on the Tennessee from 1687 to 1716.

Dodd, W. E. Economic interpretation of American history. Journ. Pol. Econ., June, 1916. Pp. 7.

A review of Professor C. A. Beard's two recent books, which "are certain to count very largely in the historical work of the future."

Folsom, J. F. A slave indenture of colonial days in New Jersey. Pro. N. J. Hist. Soc., Jan., 1916. Pp. 5.

Fuller, E. B. Recollections of an old cavalryman. Journ. U. S. Cavalry Assoc., Jan., 1916.

Account of military life on the western frontier after the Civil War.

Gallaher, R. The Indian agent in the United States since 1850. Iowa
Journ. Hist. & Pol., Apr., 1916. Pp. 66.

The second of a series of articles on this topic; describes the system from 1850 to 1912.

HINKE, W. J., translator and editor. Report of the journey of Francis Louis Michel from Berne, Switzerland, to Virginia, October 2, 1701-Dec. 1, 1762. Va. Mag. of Hist., April, July, 1916. Pp. 29, 29.

(1) An account of conditions in Virginia. (2) The report concludes with an account of an attempt to send a Swiss colony to Virginia.

HULDERT, A. B. Western ship-building. Am. Hist. Rev., July, 1916. Pp. 14.

Describes the building in the West of ocean-going vessels between 1800 and 1807.

LE Duc, W. G. The genesis of the typewriter. Minn. Hist. Bull., Feb., 1916. Pp. 6. An account, by the inventor, of the first typewriter. The idea was originated in 1850. This article was reprinted in Magazine of History, March, 1916.

LOVE, C. M. The cattle industry of the Southwest. Southwestern Hist. Quart., July, 1916. Pp. 18.

The second installment on this subject.

MARBLE, A. R. The Terre Haute Company. Ind. Mag. Hist., June, 1916.
Pp. 3.

A land company of 1816.

Martin, A. E. The anti-slavery societies of Tennessee. Tenn. Hist. Mag., Dec., 1915.

MARTIN, A. E. Pioneer anti-slavery press. Miss. Valley Hist. Rev., Mar., 1916.

Mills, W. C. Exploration of the Tremper mound. Ohio Arch. & Hist. Quart., July, 1916. Pp. 136.

An account of the contents of one of the Indian mounds in Ohio.

Oscood, E. L. Experimental course in industrial history. Hist. Teachers' Mag., Mar., 1916. Pp. 4.

The writer is delighted to find how interesting such a course is.

RICHARDSON, C. F. Reminiscences of Hon. Charles Miner, 1780-1865. Pro. Coll. Wyoming Hist & Geneal. Soc., 1916. Pp. 200.

SALIBBURY, H. S. The Mormon war in Hancock county. Journ. Ill. State Hist. Soc., July, 1915.

SCHMIDT, L. B. The economic history of American agriculture as a field for study. Miss. Valley Hist. Rev., June, 1916. Pp. 12.
Urges the further cultivation of this field.

Sears, D. David B. Sears, pioneer in the development of the waterpower of the Mississippi River. Journ. Ill. State Hist. Soc., July, 1915.

SHERWOOD, H. N. Early negro deportation projects. Miss. Valley Hist. Rev., Mar., 1916.

SIKES, E. W. Social and economic legislation in North Carolina during the Civil War. Pro. Sixteenth Ann. Sess. State Lit. & Hist. Assoc. of N. C., 1916.

TYLER, L. G. Virginia's contribution to science. William & Mary Quart., Apr., 1916. Pp. 15.

An account of the work of Virginia scientists from John Clayton of the seventeenth century to John W. Draper of the nineteenth.

Warden, D. B. Journal of a voyage from Annapolis to Cherbourg. Md. Hist. Mag., June, 1916. Pp. 15.

WHITAKER, A. P. The public school system of Tennessee, 1834-1860. Tenn. Hist. Mag., Dec., 1915.

WHITE, E. The old overland trail in Missouri, Road-Maker, Mar., 1916.

- WHITE, H. F. The career of Samuel R. Thurston in Iowa and Oregon.

  Iowa Journ. Hist. & Pol., Apr., 1916. Pp. 26.
  - Thurston lived from 1816 to 1851.
- \*Correspondence of Rev. Ezra Fisher. Quart. Oregon Hist. Soc., Dec., 1915.

  Contains an account of a journey from Rock Island to Oregon in the year 1845.
- Journal of a journey from Salem to Philadelphia in 1755. Hist, Coll. Essex Inst., Jan., 1916.
- Letters of James Rumsey, inventor of the steamboat. William & Mary Quart., Apr., 1916. Pp. 13.
- Letters written from London in 1791 to Capt. Charles Morrow in Virginia. This is the second instalment of these letters and more are to follow.
- The North-West territory. Journ. of Ill. State Hist. Soc., July, 1915.
- Uria Brown's journal. Md. Hist. Mag., Mar., June, 1916. Pp. 8, 15.
  Troubles over land claims in Ohio about 1796.
- A Western demand for internal improvements. Iowa Journ. Hist. & Pol., Apr., 1916. Pp. 3.
  - A typical editorial printed in a Western paper.

# Economic History, Foreign

## (Abstracts by Clive Day)

- Genzmen, M. Das Fischergewerbe und der Fischhandel in Mecklenburg vom 12. bis zum 14. Jahrhundert. Archiv f. Fischereigesch., Oct., 1915. Pp. 85.
- Goldstein, J. M. Russia's part in an anti-German economic coalition. Russian Rev., May, 1916. Pp. 8,
  - A substantial contribution by a Moscow professor.
- Dr Nouvion, G. La situation économique et financière du Japon. Journ. des Econ., Mar. 15, 1916. Pp. 5.
- ROULAND, E. Le Portugal: sa population et ses ressources économiques. L'Econ. Franç., June 3, 1916. Pp. 2.
- REYNOLDS, E. K. The economic resources of the Russian empire. Geog. Rev., Apr., 1916. Pp. 16.
- Sella, E. Tacito Machiavelli ed i ferrovieri. Rif. Soc., Apr., 1916. Pp. 16. Historical agreements in the position of labor in competition.

#### Commerce

#### (Abstracts by Melvin T. Copeland)

- Addices, L. Electrochemical industries and their interest in the development of water powers. Stone & Webster Journ., May, 1916. Pp. 8.
  - Essential that government adopt a liberal water power policy.
- BARRIE, J. The industrial life of Scotland. XXII. The border towns: The

origin and growth of the tweed industry. Scottish Bankers Mag., Apr., 1916. Pp. 9.

Sketchy account of early growth.

Benedict, W. The commercial renaissance of Spain. Americas, May, 1916. Pp. 3.

Evidence of commercial awakening.

Brailsford, H. N. The war after the war. New Republic, Apr. 1, 1916. Pp. 2. Philosophy of the proposed "trade war" against Germany.

Broches, L. The Russian trade vision. Annalist, June 12, 1916. P. 1. Practical steps taken to increase our trade with Russia.

CARREL, M. D. Tucuman and the sugar industry of Argentina. Americas, Apr., 1916. Pp. 7.

Duband, C. Le marché intérieur de la Russie. L'Econ. Franç., Apr. 29, 1916.
Pp. 2.

Some characteristics of Russian markets; transportation facilities; fairs.

Eltzbacher, P. Die Verteilung der Nahrungsmittel zwischen Stadt und Land. Soz. Praxis, Mar. 23, 1916. Pp. 2.

Most serious problem in regulation of limited food supplies is distribution between urban and rural population.

FARQUHAR, P. Investment in South America. Stone & Webster Journ., Mar., 1916. Pp. 11.

Advantages of concentrating our foreign investment in South America.

GAY, E. F. Russia—the other America. Russia, May, 1916. Pp. 2. Similarity in natural conditions.

Gide, C. The provisioning of France and measures to that end. Econ. Journ., Mar., 1916. Pp. 9.

Regulation of prices; importation of frozen meat through coöperative societies.

Hess, R. H. Our quest of foreign trade. Annalist, Apr. 3, 1916. Pp. 3. Clear presentation of present-day foreign trade fallacies.

Kies, W. S. A permanent foreign trade and its problems. Stone & Webster Journ., May, 1916. Pp. 13.

Successful development of permanent foreign trade depends upon growth of a broader spirit of nationalism in our commerce.

MARTENS, R. How to trade with Russia. Russia, May, 1916. Pp. 3.

Marketing methods must be adjusted to Russian conditions.

MEYER, H. H. B. List of commercial year-books and similar publications. Special Libraries, May, 1916. Pp. 3. Useful references.

PAYEN, E. Le coton et son prix. L'Econ. Franç., Apr. 22, 1916. Pp.2. Some statistics of cotton trade.

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PRATT, E. E. The balance of payments. Russia, May, 1916. Pp. 4.

United States a creditor nation as concerns current accounts and rapidly discharging long-standing foreign obligations.

PRATT, E. E. Domestic prosperity and foreign trade. Econ. Wld., May 27, 1916. Pp. 4.

Foresees continued prosperity and expansion of foreign trade.

VAIDVARIAMAN, G. A. Trade after the war. Wealth of India, Apr., 1916. Pp. 3.

Commercial regulations recommended by advisory committee of British Board of Trade.

VILLARD, H. G. German methods of developing export trade. Econ. Wld., Mar. 25, 1916. Pp. 2.

Praises export bounty system of German cartels.

After the war-exports of manufacturers. Bull. Pan Am. Union, Mar., 1916. Pp. 10.

European countries will probably be better prepared than United States for competition in foreign markets.

The effect of the war upon the worlds' foreign trade. Econ. Wld., Apr. 1, 1916. Pp. 2.

Readjustment of character and direction of world's trade has strengthened economic position of newer companies.

The great fairs of Russia (Illustrated). Russia, June, 1916. Pp. 11.

Trading facilities; list of fairs.

Returning to barter. Annalist, May 8, 1916. P. 1.

Healthy increase in our import trade.

Silk manufacture in the United States and the world's silk supply. Econ. Wld., May 13, 1916. Pp. 2.

Rapid growth of industry.

Trade methods of foreign countries in Russia. Russian Rev., June, 1916. Pp. 5.

Respective advantages of various marketing agencies.

Why we are not yet the world's commercial center. Americas, Apr., 1916. Pp. 5.

Reasons for London's preëminence.

Le crise des frets. L'Econ. Franç., Mar. 18, 1916. Pp. 2.

Causes of high ocean freight rates.

# Railways

(Abstracts by Julius A. Parmelee)

- ALLIX, G. Les résultats de 1915. II. Réseau P. L. M. III. Réseau du midi. IV. Réseau de l'est. V. Réseau du nord. Journ. des Transports, Apr. 22, 29, May 13, 27, 1916. Pp, 5, 4, 4, 4.
- PAYEN, E. Le coton et son prix. L'Econ. Franç., Apr. 22, 1916. Pp. 2. Pp. 4.

BAUER, J. The control of return on public utility investments. Pol. Sci. Quart., June, 1916. Pp. 29.

Interesting proposal for stabilizing the ascertained value of railway property, and adjusting the earning power to such value.

BONBRIGHT, J. C. Depreciation and rate control: a further discussion. Quart. Journ. Econ., May, 1916. Pp. 13.

Busfield, T. L. The design of large passenger terminals. Ry. Age Gaz., May 5, 1916. Pp. 5.

Carter, W. S. Why the eight-hour work day is right. Locomotive Firemen & Engrs. Mag., June, 1916. Pp. 14.

Series of short papers discussing the trainmen's eight-hour day awards, by the president of one of the trainmen brotherhoods.

CROWDER, T. R. Sanitation of railway cars. Pro. N. Y. Railroad Club, Apr. 21, 1916. Pp. 13.

CUNNINGHAM, W. J. The operation of the railroads in New England. Ry. Age Gaz., June 2, 1916. Pp. 6.

Statistical comparison of various characteristics of the Boston and Albany, Boston and Maine, and New York, New Haven and Hartford railroads.

DAYTON, T. W. Who owns the railroads? Railroad Man's Mag., Aug., 1916. Pp. 9.

The railway's 600,000 stockholders.

DROEGE, J. A. The railways and preparedness. Pro. N. E. Railroad Club, Apr. 11, 1916. Pp. 21.

DUNN, S. O. The failure of government ownership in Canada. Journ. Pol. Econ., June, 1916. Pp. 25.

Large construction, capital, and operating costs attributed to governmental extravagance and to politics.

FORMAN, H. W. The revised standard code-forms of orders. Ry. Age Gaz., May 5, 1916. Pp. 3.

Fourth and final article of a series.

Frame, A. J. Governmental activities hamper American progress. Rand-Mc-Nally Bankers' Mo., July, 1916. Pp. 10.

Gordon, A. Accidents at grade crossings and to trespassers. Ry. Age Gaz., June 16, 1916. Pp. 3.

Public largely to blame. Suggests more rigid anti-trespass and safety-first legislation.

Goss, W. F. M. Electrification of railroads. Pro. Western Ry. Club, Feb. 15, 1916. Pp. 23.

With special reference to Chicago conditions. Illustrated.

Goss, W. F. M. Smoke abatement and electrification of railway terminals in Chicago. Journ. Western Soc. Engrs., Apr., 1916. Pp. 20.

- HALSEY, F. M. The Norfolk Southern Railroad. Moody's Mag., July, 1916.
  Pp. 3.
- Halsey, F. M. The Southern Railway. Moody's Mag., May, 1916. Pp. 4. Optimistic analysis of the past, present, and future of this railway system. With map.
- Heilman, R. E. The control of interstate utility capitalization by state commissions. Journ. Pol. Econ., May, 1916. Pp. 15.
- Unsatisfactory character of present control by state commissions.

  18ETON, R. E. A new railroad policy. Banking Law Journ., Mar., 1916.

  Pp. 5.
- The federal incorporation of railways as an antidote to existing evils of regulation.
- JOYCE, H. L. Lighterage. Pro. N. Y. Railroad Club, May 19, 1916. Pp. 23. Historical development of lighters and lighterage problems.
- Kennan, G. Misrepresentations in railroad affairs. N. Am. Rev., June, 1916. Pp. 12.
- The Alton case once more. Counter reply to Professor Ripley in the April number.
- LAFFEY, M. C. The Western Pacific Railway. Moody's Mag., June, 1916.
  Pp. 4; with map.
- I.Auck, W. J. Why railroads go to receivers. Pearson's Mag., Feb., 1916.
  Pp. 8.
- Nash, L. R. History and economics of the jitney. Stone & Webster Journ., May, 1916. Pp. 17.
- DE NOUVION, D. Les compagnies de chemins de fer en France en 1916. Journ. des Econ., May, 1916. Pp. 20.
- Review of the year's operations on systems of the East, Midi, Nord, Orleans, P-L-M, and Ouest.
- OSTERHELD, T. W. History of the nationalization of the railroads of Mexico. Journ. Am. Bankers Assoc., May, 1916. Pp. 7.
- PARK, W. L. Railways in a system of national defense. Econ. Wld., June 3, 1916. Pp. 3.
- Parks, C. E. Government ownership and its relation to transportation. Santa Fe Mag., July, 1916. Pp. 8.
- Payen, E. Les grandes compagnies françaises de chemins de fer en 1915. I. Les recettes brutes. II. Les dépenses et le produit net. L'Econ. Franç., June 10, 17, 1916. p. 3, 3.
- PAYNE, J. L. Canadian railways in the eventful year 1915. Ry. Age Gaz., May 5, 1916. Pp. 2.
- Smaller traffic and revenues than in the preceding year, but economies kept net income at normal level.
- RAFFALOVICH, A. La guerre et les chemins de fer allemands. Journ. des Econ., Mar., 1916. Pp. 19.

Historical description of the military development of Germany's railway system since 1870.

Riegel, S. S. Modern superheater and its performance. Ry. Age Gaz., June 30, 1916. Pp. 6.

RIPLEY, W. Z. To prevent industrial war. New Repub., May 6, 1916. Pp. 2.

Administrative wage commission needed, with permanence of tenure, to settle disputes between railways and their employees.

SARJANT, S. J. The railways of India. Pro. Canadian Railway Club, Apr., 1916. Pp. 28.

Sisson, F. H. Under forty-nine masters. Moody's Mag., June, 1916. Pp. 6.
On the conflict between federal and state railway regulation.

Baghdad railway; Its history and construction. S. African Railways and Harbours Mag., May, 1916. Pp. 4, map.

China's railways. Econ. Wld., July 15, 1916. Pp. 2. History, mileage, and finances.

Corporation notes and railroad equipment obligations. Wld. Wk., May, 1916. Pp. 2.

Their value for purposes of temporary investment.

Developing carload freight traffic on Illinois traction system. Elec. Ry. Journ., July 8, 1916. Pp. 10, illus.

An experiment in cooperation. Annalist, June 5, 1916. Pp. 2.

The cooperative effort of the railways, the shippers, and the Interstate Commerce Commission to relieve freight congestion in the East. This effort was successfully concluded on May 31.

Gateways of the cities. S. African Railways and Harbours Mag., Apr., 1916. Pp. 5.

Illustrated discussion of railway terminal architecture.

Home railway problems. Finan. Rev. Rev. (London), June, 1916.

Wage and cost-of-material problems after the war.

Long freight trains and railway accidents. Ry. Age Gaz., May 12, 1916. Pp. 6.

Digest of Bulletin 92 of Bureau of Railway Economics, Arguments for and against Limitation of Length of Freight Trains.

New railways in North Manchuria. Far Eastern Rev., Apr., 1916. Pp. 5.
Russo-Chinese agreement for railway construction. Illustrated.

An operating study of the Rock Island. Railway Age Gaz., May 19, 1916. Pp. 6.

Ownership of railway stock. Ry. Age Gaz., June 16, 1916. Pp. 2.

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DOOLITTLE, F. W. The Cleveland street railway situation. Journ. Engrs. Club of St. Louis, Mar.-Apr., 1916.

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  Traces the steps in the growth of the Russian debt.
- RAFFALOVICH, A. L'exposé financier de M. Helfferich pour 1916-1917. Journ. des Econ., Apr., 1916. Pp. 5.
- A critical discussion of the recent budget speech of the German minister of finance.
- Reed, H. E. Tendencies in growth of financial burdens demanding consideration. Commonwealth Rev., Apr., 1916. Pp. 7.
- Describes the success of state tax associations and urges the formation of one in Oregon.
- TRUSSLER, H. R. Exemption of school property from taxation. School Board Journ., Feb., 1916. Pp. 3.
- Young, F. G. Economic purposes and possibilities in state administration in Oregon. Commonwealth Rev., Apr., 1916. Pp. 7.
- Describes briefly the work of the state tax commission and other departments of public administration in Oregon.

ZNAMIECKI, A. Russian public debt and government securities. Americas, May, 1916. Pp. 5.

A brief discussion of Russian government securities from the point of view of the investor.

Budget legislation in two states, Munic. Research, Feb., 1916. Pp. 102.

A study of the development of executive responsibility in the state government of New Jersey and New York.

Charges made by the city for certain permits, rights, privileges, rents, and licenses. Baltimore Munic. Journ., May 12, 1916.

The next step in land valuation and taxation. Land Values, May, 1916. Pp. 3.

The United Committee for the taxation of land values reviews the law of 1909 and urges its extension as a means of meeting England's heavy expenditures.

Standardization of public employments. Munic. Research, Nov., 1915. Pp. 117.

Traces the progress of civil service reform in the United States and of the recent movement for a proper classification of the salaries of public employees.

Dépenses et ressources de guerre: France, Angleterre, Allemagne. L'Econ. Franç., Mar. 25, 1916. Pp. 2.

Compares briefly the financial positions of France, England, and Germany. Predicts French taxes will increase after the war from 80 to 100 per cent.

Les trois taxes. (1) L'impôt sur le revenu. (2) La taxe sur le revenu des valeurs mobilières placées à l'étranger. (3) La taxe sur les bénéfices exceptionnels de guerre. L'Econ. Franc., Apr. 8, 1916. Pp. 3.

A brief description of the administration of the new French taxes; on income, foreign securities, and war profits.

Bundesfinanzen. Der Schweizer Volkswirt, Feb., 1916. Pp. 8.

A collection of short articles on the Swiss system of taxation.

## Housing

(Abstracts by James Ford)

Adams, T. Town planning and housing. Wildwood Mag., Spring, 1916. Pp. 4.

Aldrings, H. R. Compulsory town planning. Garden Cities & Town Planning, Feb., 1916. Pp. 8.

BISSELL, C. T. Fire limits districts and their importance. Nat. Munic. Rev., Jan. 1916. Pp. 5.

Baown, F. C. Workmen's housing at Hopedale, Mass. Arch. Rev., Apr., 1916.
Pp. 4.

BRYCE, J. Suggested town planning details for Scottish conditions. Journ. Inst. Munic, & County Engrs., June, 1915. Pp. 23.

Deals altogether with building restrictions.

Chapman, G. A. The home, the best methods of building construction. Minnesotan, Apr., May, June, 1916.

- CULPIN, E. G. State garden villages. Garden Cities & Town Planning, Feb., 1916. Pp. 4.
- Reviews Departmental Committee's report on settlement of discharged soldiers on the land.
- DAVISON, R. L. The problem of low-cost housing. Arch. Rev., May, 1916.
  Pp. 2.
- FORD, G. B. Grading the height, size and use of all buildings in New York, Journ. Am. Inst. Archs., May, 1916, Pp. 3.
- FOURCADE ET DÉPINAY. Les conséquences de moratorium des loyers, au point de vue des Societés d'habitations à bon marché. Bull. de Soc. Fr. des Hab. à Bon Marché, Feb. 4, 1915. Pp. 7.
- GILBERT, C. D. Low cost houses for industrial operatives. Concrete, June, 1916. Pp. 2.
  - Detailed estimate for 4-room concrete house.
- JEFFREY, M. M. House property management on Miss Octavia Hill's lines. Charity Organ. Rev., Apr., 1916. Pp. 8.
- Kimball, T. A brief survey of recent city planning reports in the United States. Landscape Architecture, June, 1915. Pp. 29.
- Koch, F. J. A little model town within a city. Am. City, Mar., 1916. Pp. 2. "Model homes community" for negroes in Cincinnati.
- LOVAT-FRASER, J. A. Housing after the war. Garden Cities & Town Planning, Apr., 1916. Pp. 3.
- von Mangoldt, K. Unere künftige Wohnungspolitik. Soz. Praxis, Dec. 9, 1915. Pp. 3.
- MEAD, M. The Ellen Wilson homes. Real Estate Mag., Sept., 1915. Pp. 11.
- Müller, J. Einige Durchschnittszahlen über amerikanische Wohnverhältnisse. Jahrb. f. Nat. Oek., III, 50, 6, 1915. Pp. 5.
  - Statistics borrowed from the thirteenth census.
- NETTLEFOLD, J. S. Economics of town planning. Garden Cities & Town Planning, Jan., 1916. Pp. 5.
- Nolen, J. Real estate and city planning. City Plan, Apr., 1916. Pp. 6.
- Norchoss, O. W. Country homes for the wage earner. Worcester Mag., Jan., 1916. Pp. 2.
- Phillips, R. R. An English housing scheme. Duchy of Cornwall estate at Kennington, London. Brickbuilder, Mar., 1916. Pp. 6.
- POPE, R. A. A discussion of the controlling principles of building height limitations for great cities. Town Planning Rev., Oct., 1915. Pp. 12.
- POTTER, L. L. War-boom towns. I. Bridgeport. Survey, Dec. 4, 1916. Pp. 8.
- RICHARDS, J. R. Housing and its relation to the health of the community. City of Lexington, Dec., 1915. Pp. 6.

- Schneider, F. A survey of the activities of municipal health departments in the United States. Am. Journ. Pub. Health, Jan., 1916. Pp. 17.
- Spahr, A. H. The town of Midland, Pa. A new development in housing near Pittsburgh. Arch. Rev., Mar., 1916. Pp. 4.
- Verwilghen, R. Les abris provisoires. Leur rôle dans la reconstruction des villes detruites. Garden Cities & Town Planning, Feb., 1916. Pp. 5.
- VETTERLEIN, I. Die Miethauses Gruppe auf der Mathildenhöhe in Darmstadt. Wasmuths Monatsh. f. Baukunst, I, 5-6, 1915.
- Wallser, N. Chicago housing conditions. X. Greeks and Italians in the neighborhood of Hull House. Am. Journ. Sociol., Nov., 1915. Pp. 32.
- Weikert, Vorschläge zur Verbesserung der großsstädtischen Mietshaserne. Der Städtebau, Jan., 1916. Pp. 2.
- Williams, F. B. The significance of the English town planning act of 1909. Landscape Architecture, Jan., 1916. Pp. 12.
- Municipal lodging houses. Report to Advisory Social Service Committee of New York City, Sept., 1915. Pp. 24.
- Tentative report of the Commission on Building Districts and Restrictions. Landscape Architecture, Apr., 1916. Pp. 14.
- La question des loyers et le projet de loi en discussion devant la Chambre. L'Econ. Franç., Apr. 15, 1916. Pp. 2.
- Wohnungs and Bodenfragen. Soz. Praxis, Mar. 9, 1916. Pp. 2.

# Insurance and Pensions

(Abstracts by Henry J. Harris)

Abrams, C. Practical operation of the Oregon workmen's compensation act. Commonwealth Rev., Apr., 1916. Pp. 11.

The industrial Accident Commission of Oregon has been in existence 20 months, has handled 8359 claims and in 1914 provided compensation benefits of \$370,200; it is estimated that the state compulsory insurance system saved in this year alone \$351,522.

FLYNN, B. D. Work of the statistical committee of the bureau of personal accident and health underwriters. Casualty, Actuarial & Stat. Soc. Am., Feb. 25, 1916. Pp. 7.

This recently formed committee has planned special studies on:
(a) total experience; (b) accumulation feature; (c) automobile feature; (d) double indemnity feature; (e) beneficiary feature; (f) partial disability indemnity feature; (g) hospital and surgeon's fees feature; (h) gunshot wounds.

Forsyth, C. H. Workmen's compensation in the United States. Am. Underwriter, Mar.-Apr.-May, 1916.

Compensation systems should permit private, mutual, states, etc., insurance forms to exist competitively.

GOMPERS, S. Voluntary insurance vs. compulsory. Am. Federationist, May, June, 1916. Pp. 25, 13.

Reprints, with comment of hearings before congressional committee on proposed social insurance commission. Urges that trade union efforts be considered in any plan for social insurance.

GREENE, W. W. Should the compensation on premium reflect the experience of the individual risk? Econ. Wld., May 27, 1916. Pp. 3.

Any system of compensation rates dependent upon the experience of the individual risk will be virtually unworkable.

Hamilton, J. M. Our facilities for marine insurance during the war. Am. Underwriter, May, 1916. Pp. 5.

Only a limited amount of American capital has been available for marine insurance. With the larger returns due to war conditions, American enterprise should expand our facilities.

Hoffman, F. L. Government war risk insurance. Spectator, Feb. 17, 24, 1916. Pp. 1, 2.

Review of history and operations of U. S. Bureau of War Risk Insurance. "The experience must be considered extremely gratifying."

Huebner, S. S. Insurance by government compulsion in the United States. Econ. Wld., Apr. 22, 1916. Pp. 2.

Voluntary insurance, even when provided by government offices at cost, has practically failed to reach a large proportion of the population; compulsory insurance the only solution, though choice of carrier should be allowed.

LEARNED, W. P. Problems and practice in burglary insurance. Econ. Wld., May 20, 1916. Pp. 3.

Discussion of bankers' vaults, residence, mercantile, open stock, and robbery insurance.

MADDRILL, J. D. The compensation cost of occupational disease. Pro. Casualty, Actuarial & Stat. Soc. Am., Feb. 25, 1916. Pp. 16.

On the basis of British experience and the study of the Ohio State Board of Health, the probable cost of occupational diseases for Massachusetts is computed. Gives useful bibliography.

Moore, J. P. Principles and history of fire insurance. Econ. Wld., Apr. 29, 1916. Pp. 4.

Mowbray, A. H., Black, S. B., and Beyer, D. S. On the relation of accident frequency to business activity. Econ. Wld., June 17, 1916. Pp. 2.

The accident frequency per unit of exposure tends to rise and fall as production rises and falls, though not necessarily in the same ratio.

OLIFIERS, E. Statistics necessary for computing net compensation rates. Pro. Casualty, Actuarial & Stat. Soc. Am., Feb. 25, 1916. Pp. 5.

Lists the data needed to compute: (1) death benefits; (2) permanent benefits; and (3) temporary disability benefits.

PHELPS, E. B. War risks. Am. Underwriter, May, 1916. Pp. 15.

Review of experience of American companies (fire, life, and marine) in the War of 1812, Mexican War, and Civil War. Tables also show mortality in European wars.

Rosenfeld, H. L. Development of group insurance. Am. Underwriter, Apr., 1916. Pp. 3.

Rubinow, I. M. American methods of compensating permanent partial disabilities. Pro. Casualty, Actuarial & Stat. Soc. Am., Feb. 25, 1916. Pp. 18.

Analysis and critique of the methods in use under state compensation laws. At present time adequate data for the development of a satisfactory method are lacking.

Rubinow, I. M. The relation between private and social insurance. Econ. Wld., June 3, 1916. Pp. 3.

There is a natural field for private insurance and a natural field for social insurance; there may also be a twilight zone. Coöperation between the two branches may remain possible for an indefinite time.

Sherbard, M. State fire insurance. Econ. Wid., May 13, 1916. Pp. 2.

The greatest weakness of state insurance would be the political control that would necessarily go with it.

STONE, C. R. The development of automobile insurance. Econ. Wld., May 20, 1916. Pp. 2.

The present form of policy is in need of improvement. The Swiss plan of compulsory insurance contains valuable suggestions.

Vaughan, H. The valuation of double endowment assurances. Journ. Inst. Actuaries, Apr., 1916. Pp. 14.

Investigation of the applicability of the Lidstone method to double endowments.

Watson, E. E. Merit rating in workmen's compensation insurance. Econ. Wld., May 6, 1916. Pp. 4.

The most effective schedule rating system that it is possible to construct, will be so fallible that it will demoralize the intended function of merit rating.

Development of insurance abroad—Japan. Daily Com. Repts., July 1, 1916. Pp. 2.

Statistics of life, marine, and fire companies for 1914.

Fire insurance in Great Britain in 1915. Econ. Wld., June 10, 1916. Pp. 2.

For the period 1909-1915 the losses of American stock companies averaged 53.27 per cent of premiums; 19 British companies had 56.9 per cent in 1914 and 50.5 per cent in 1915.

A government plea for health insurance. New Republic, May 20, 1916. Pp. 2.

Comment on Warren and Sydenstricker's Public Health Service bulletin on health insurance.

A new method of computing accident rates, Mo. Rev. U. S. Bureau Labor Stat., July, 1916. Pp. 12.

Presented by the bureau for criticism and suggestions. Basis of method is the full-time worker of 300 days of 10 hours each. Distinguishes between the usual "frequency" rates (so many injuries per 1000 employees) and the proposed rates, which are "severity" rates. Fatalities are assumed to be equal to a loss of 9000 days; permanent total disablement at 10,500 days; permanent partial disablements are rated at 2,808 days for the loss of an arm, while other losses of members or other disablements are taken as fractions of loss of an arm.

Thrift or prosperity? Annalist, Apr. 17, 1916. P. 1.

Company officials regard the slackening in insurance as due to general prosperity.

Unemployment insurance as a means of thrift. New Statesman, Apr. 15, 1916. Pp. 2.

Advocates the extension of the British insurance to cover the employees likely to be unemployed when the present demand for munitions, etc., ceases.

Workmen's insurance in Germany in 1913. Econ. Wld., May 13, 1916. Pp. 4.
Reprint of article in May issue of Monthly Review of the United States Bureau of Labor Statistics.

The December issue of the Review will contain an article on "The Federal Rural Credit Bill," by Professor George E. Putnam, of the University of Kansas, and also a reply to Professor Adams' article on "Tax Exemption through Tax Capitalization: A Fiscal Fallacy" by Professor Seligman.

National Association of Corporation Schools. The fourth annual convention of the National Association of Corporation Schools was held at Pittsburgh, May 30-June 2, with headquarters at the Carnegie Institute of Technology. Reports were presented by the several committees on the following divisions of the association's activities: (1) allied institutions; (2) public education; (3) trade apprenticeship schools; (4) special training schools; (5) office work schools; (6) advertising, selling and distribution schools; (7) retail salesmanship; (8) codification of corporation, educational systems; (9) vocational guidance; (10) employment plans; (11) safety and health; (12) unskilled labor.

Although the purpose of the association is primarily educational, yet the presence of such committees as those on employment plans, safety and health, unskilled labor, and vocational guidance (the latter term being used by the chairman of the committee to include the well-being of the adult in industry), and the fields which they have covered in their work indicate the recognition of certain related problems of personnel whose solution is fundamental to any sound system of corporation education and training. A summing up of these basic factors and the means by which they can be made to function, based largely on experiences drawn from the enlightened business policy of well-known companies and elaborated into an ideal of management, furnished the text of the report on vocational guidance under the title The Organic Development of Business.

The quest of the companies belonging to the association is for acceptable standardized practice (the association serving as a clearing house to this end); and the reports submitted and discussed at the convention showed considerable progress in systematizing, evaluating.

<sup>1 &</sup>quot;The object [of the association] is to aid corporations in the education of their employees: (1) by providing a forum for the interchange of ideas; (2) by collecting, and making available, data as to successful and unsuccessful plans of developing the efficiency of the individual employee." (Constitution, art. II, sec. 1, revised June 2, 1916.)

and codifying the best features of educational and industrial practice found among member corporations.

For the purpose of effecting greater cooperation with outside educational agencies, the committee on allied institutions during the current year has enlarged its membership so as to include a representative each of the General Federation of Women's Clubs, the National Society for the Promotion of Industrial Education, Columbia University, the International Trade School Committee, and the Vocational and Trade Schools of New York City.

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Mr. Herbert J. Tily, of Strawbridge and Clothier, Philadelphia, was elected president for the coming year, to succeed Mr. John McLeod, of the Carnegie Steel Co. It was voted to hold the next annual convention at Buffalo.

### HENRY C. METCALF.

Late in July a Joint Special Committee of ten members of Congress was appointed to make an investigation into railroad conditions under the Newlands Act. The committee is made up of five members of the Senate Committee on Interstate Commerce and five members of the House Interstate and Foreign Commerce Committee. Senator Joseph T. Robinson, of Arkansas, is chairman.

The committee on education of the Cleveland Chamber of Commerce has published, under date of March 23, 1916, a report on A Collegiate School of Business Administration for Cleveland.

Information in regard to the American Social Hygiene Association, organized in 1914, may be had of the secretary, Dr. Donald R. Hooker, Baltimore. The present membership is 480. The association publishes a quarterly magazine, Social Hygiene, and a monthly news Bulletin. More than twenty special pamphlets have also been circulated.

An official commission of three persons, Alfred H. Smith, president of the New York Central system, Sir Henry Drayton, of the Canadian Railway Commission, and Sir George Paish, editor of The Statist, has been appointed to investigate the railroads of Canada.

The Business Training Corporation (185 Madison Ave. New York), of which Professor William H. Lough is president, has recently issued a booklet on Preparedness for World Trade, by Dr. E. E. Pratt, and Export Trade—A Profit Maker, by Walter F. Wyman, export manager of Carter's Ink Company. The text-books of the Course in Foreign Trade are being issued in a series

of twelve small volumes, of which four have thus far appeared: I, Economics of World Trade, by O. P. Austin; II, The World's Markets, by E. N. Vose; III, Export Policies, by E. E. Pratt, E. C. Porter, and P. B. Kennedy; IV, Export Houses, by J. F. Fowler, C. A. Richards, and H. A. Talbot. The subjects of the other studyunits are: V, Direct Exporting; VI, The Export Salesman; VII, Shipping; VIII, Financing; IX, Export Technique; X, Foreign and Home Law; XI, Importing; XII, Factors in Trade Building.

Professor C. P. Huse, of Boston University, has recently published a volume in the Harvard Economic Studies entitled *The Financial History of Boston*.

The Geographical Review notes that Mr. J. W. Redway is preparing a revised edition of his Commercial Geography and is planning a new textbook on the economic geography of the United States.

D. Appleton and Company has published Professor Emory R. Johnson's new book on The Panama Canal and Commerce and also Principles of Railroad Transportation, by Professor Johnson and Dr. T. W. Van Metre. As noted in a previous issue of the Review, this volume supersedes the book on American Railway Transportation.

The H. W. Wilson Company announces a second and revised edition of the Debaters' Handbook on Trade Unions.

A. S. Clark (218 Washington St., Peekskill, N. Y.) has recently issued a typewritten catalogue of *Books and Pamphlets relating to Railroads*.

Houghton Mifflin announces for early publication Taxation of Land Values, by Yetta Scheftel.

Further new books to be noted are:

History of the Working Class in France, by Wergland (Univ. of Chicago Press).

Marketing Perishable Farm Products, by A. B. Adams (Longmans).

The Organization of the Lumber Industry, by Wilson Compton (Chicago, American Lumberman).

Railway Expansion in Latin America, by F. M. Halsey (Moody Mag. & Bk. Co).

American Interoceanic Canals: A List of References in the New York Public Library (New York, The Library).

Exporting to South America, by E. R. Filsinger (Appleton).

Industrial Preparedness, by C. E. Knoeppel (Engg. Mag. Co.).
Profit Sharing by American Employers (National Civic Federation).
A List of 1600 Business Books (H. W. Wilson Co.).

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The Control of Strikes in American Trade Unions, by G. M. Janes (Johns Hopkins Press).

Principles of Money and Banking, by H. G. Moulton (Chicago Univ. Press).

The Predetermination of True Costs and Relatively True Selling Prices, F. A. Parkhurst (Wiley).

Charity and Social Life, by Sir C. S. Loch (Macmillan).

The Research Department of the English Fabian Society is engaged in a preliminary statistical survey of British trade unionism, in order to show what branches of trade unions are to be found in the several government areas (Fabian Society, 25 Tothill St., Westminster, London, S. W.). The society has also recently published How to Pay for the War, being a collection of proposals offered to the Chancellor of the Exchequer by the Research Department, edited by Sidney Webb (6s.).

The Athenaeum (London, Eng.) is publishing, at the request of the Council of the Library Association, a Subject Index to Periodicals. The April, 1916, number is devoted to economic and political sciences (pp. 28, 1s.).

The H. W. Wilson Company has begun the publication of an Agricultural Index, the first number of which appeared in March. The journal will be issued quarterly, each cumulating all previous items.

Russia is a monthly journal published by R. Martens and Company (24 State St., New York). This magazine is edited by Benjamin Baker and is devoted to Russian-American trade. In the first number, for March, 1916, are articles on "Russia—the other America," by Edwin F. Gay; "Russia's financial recovery after the war," by O. M. W. Sprague; and "America not yet a creditor nation," by E. E. Pratt.

A new economic periodicial is the Bengal Economic Journal, published by the Bengal Economic Association, edited by Professor C. J. Hamilton and Professor J. C. Coyajee. The first number was issued in April, 1916 (Macmillan & Co., price, Rs. 10 per annum). This contains articles on "The effect of poverty on the public health in India," "The economic position of education in India," and "The economic development of Japan."

## Appointments and Resignations

Dr. John Bauer, formerly of Cornell University and later of the New York Public Service Commission, has been appointed assistant professor in economics at Princeton University. Dr. Bauer will have charge of the work in accounting.

Mr. Hubert E. Bice has been appointed an instructor in economics at the Ohio State University.

Dr. E. J. Brown, who has been associate professor of economics at the Oregon Agricultural College, is to be professor of social science at the University of Arizona.

Dr. Ernest E. Burgess, assistant professor of sociology in Ohio State University, has accepted a position in the University of Chicago.

Dr. Neil Carothers, for some years assistant professor in economics at the University of Arkansas, has been appointed assistant professor of economics at Princeton University.

Mr. E. O. Christiansen has been appointed instructor in business management at the Massachusetts Institute of Technology.

Mr. C. H. Crennan taught in the summer school of the University of Indiana.

Mr. Fred C. Croxton, chief statistician and chief mediator of the Industrial Commission of Ohio, has resigned in order to accept a position as director of the public service department of the Ohio Institute of Public Efficiency, which is engaging in a comprehensive social survey of Ohio.

Mr. Francis W. Dickey, who was instructor in political science at Western Reserve University, has been appointed professor of government and economics at LaFayette College.

Dr. P. H. Douglas has been appointed instructor in economics at the University of Illinois.

Professor Ralph E. George has been granted leave of absence from Whitman College and expects to spend the year in travel and study.

Mr. George Gephart has been appointed an instructor in economics at the Ohio State University.

Dr. Lewis H. Haney, who was granted leave of absence by the University of Texas to conduct the Federal Trade Commission's

investigation of gasoline prices, has resigned his position as professor of economics. Dr. Haney has been appointed one of a board of three economists recently established by the commission and known as the Advisory Economic Board.

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Professor Ralph E. Heilman, of the University of Illinois, has been appointed professor of economics and social science at Northwestern University.

Dr. Stanley E. Howard, of Mt. Holyoke College, has been appointed instructor in economics at Princeton University.

Dr. Eliot Jones, formerly associate professor at the State University of Iowa, has been appointed professor of economics at the University of Texas.

Assistant Professor Harold Knauth, of Princeton University, will be on leave of absence during the next academic year. He will spend his time largely in Washington and New York in the study of certain phases of the trust problem.

Professor Walter E. Lagerquist has been promoted to an associate professorship in the School of Commerce of Northwestern University.

Professor J. Laurence Laughlin, head of the department of political economy at the University of Chicago, has retired.

Mr. H. A. Logan has been appointed instructor in political economy at Purdue University.

Milo R. Maltbie, former member of the New York Public Service Commission, has been appointed city chamberlain succeeding Henry Bruére.

Professor Henry C. Metcalf has leave of absence from his duties at Tufts College next year and will devote his time to visiting industrial plants and educational institutions.

Miss Edith M. Miller, assistant statistician of the Industrial Commission of Ohio, has resigned her position and will pursue graduate work in economics the coming year.

Professor H. A. Millis, of the University of Kansas, has been appointed associate professor in political economy at the University of Chicago.

Mr. J. E. Moffat has been appointed instructor in political economy at the University of Indiana.

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Professor C. C. North, professor of sociology at DePauw University, is to succeed Dr. Burgess at the Ohio State University.

Dr. F. E. Richter has been appointed assistant professor in economics at Northwestern University.

Mr. Horace Secrist has been promoted to the rank of associate professor in Northwestern University.

Dr. Ernest R. Spedden has been appointed professor of economics at the Baltimore School of Commerce and Finance and will be in charge of the courses in economics and business organization.

Dr. W. H. S. Stevens, of Tulane University, is serving on the staff of the Federal Trade Commission during the summer months.

Mr. Walter W. Stewart, of the University of Missouri, has been appointed professor of economics at Amherst College.

Professor Arthur E. Swanson has been promoted to an associate professorship in the School of Commerce of Northwestern University.

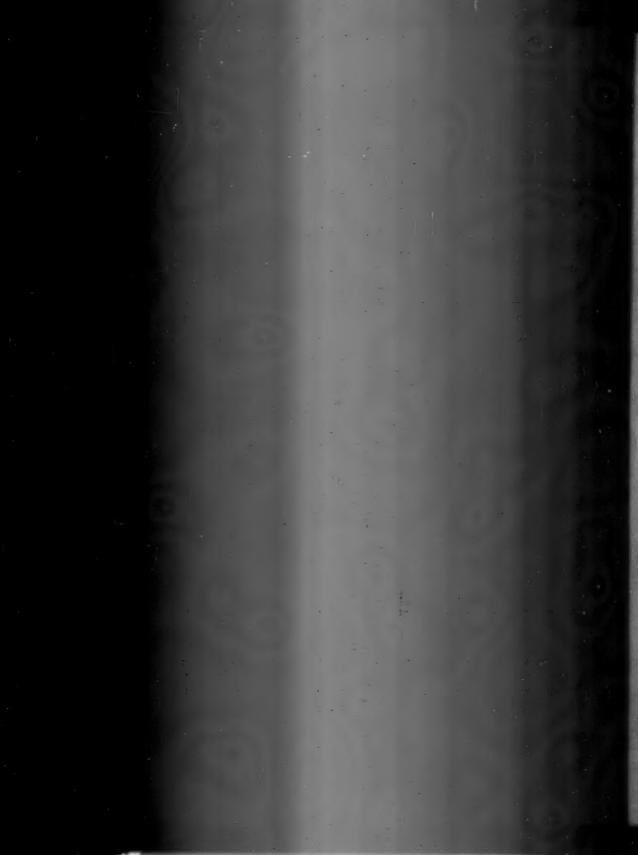
Mr. J. Viner has been appointed instructor in political economy at the University of Chicago.

Mr. W. E. Warrington taught in the Duquesne University at Pittsburgh during the summer.

Associate Professor Robert F. Hoxie, of the University of Chicago, died June 22, 1916. Professor Hoxie was the author of Scientific Management and Labor, published in 1915.

Mr. James G. Cannon died July 6, 1916. Mr. Cannon was the author of Clearing Houses and of pamphlets on Bank Credits, Buying Commercial Paper, and articles dealing with clearing house procedure.





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Inquiries and other communications regarding membership, meetings, and the general affairs of the Association, as well as orders for publications, should be addressed to the Secretary of the American Economic Association, Ithaca, N. Y.

\*Deceased.

#### AMERICAN ECONOMIC ASSOCIATION

The American Economic Association is an organization composed of persons interested in the study of political economy or the economic phases of political and social questions. As may be seen by examining the list of members and subscribers printed in this volume, not only are all the universities and the most prominent colleges in the country represented in the Association by their teachers of political economy and related subjects, but a large number of members come from among business men, journalists, lawyers, men in public life, and others interested in the theories of political economy, or, more often, in their applications to social life. There are, further, over three hundred subscribers, including the most important libraries of this country. The Association has besides a growing representation in foreign countries.

The annual meetings give opportunity for social intercourse; they create and cement acquaintanceship and friendship between teachers in different institutions, and bring into touch with each other students and business men interested in the social and economic problems of the day. The meetings aim to counteract any tendency to particularism which geographical separation and diverse interests might otherwise foster. The annual meeting for 1916 will be held in Columbus, Ohio, during the Christmas holidays.

The Publications of the Association, a complete list of which is printed at the end of this volume, were begun in March, 1886. The first series of eleven volumes was completed by a general index in 1897. The second series, comprising two volumes, was published in 1897-1899, and in addition thereto the Association issued during 1896-1899 four volumes of Economic Studies. In 1900 a third series of Quarterly Publications was begun with the Papers and Proceedings of the Twelfth Annual Meeting, and was continued through 1910 with ample amount and variety of matter. The Economic Bulletin, issued quarterly and devoted to bibliography and current notes, was also published by the Association during the three years, 1908, 1909, and 1910.

In 1911 the Association began publishing the American Economic Review, a quarterly journal devoted to articles on economic subjects, reviews, abstracts of articles in current journals, and a classified bibliography of economic publications. Though less than six years old, it has already made a place for itself among the serious scientific journals of the country.

The American Economic Association is the organ of no party, sect, or institution. It has no creed. Persons of all shades of economic opinion are found among its members, and widely different views are given a hearing in its annual meetings and

through its publications.

With the exception of the editor of the American Economic Review, the officers of the Association receive no pay for their services. Its entire receipts are expended for the editing, printing, and circulation of the publications and for the annual meetings. Any member, therefore, may regard his annual dues either as a subscription to an economic publication, a payment for membership in a scientific association, or a contribution to a fund for publishing valuable papers on economic subjects.

# CONSTITUTION OF THE AMERICAN ECONOMIC ASSOCIATION

(As Revised at the Annual Meeting, December, 1911)

#### ARTICLE I

#### NAME

This society shall be known as the American Economic Asso-CIATION.

#### ARTICLE II

#### OBJECTS

- 1. The encouragement of economic research, especially the historical and statistical study of the actual conditions of industrial life.
  - 2. The issue of publications on economic subjects.
- 3. The encouragement of perfect freedom of economic discussion. The Association as such will take no partisan attitude, nor will it commit its members to any position on practical economic questions.

#### ARTICLE III

#### MEMBERSHIP

- 1. Any person interested in economic inquiry may, on the nomination of a member, be enrolled in this Association by paying \$5, and after the first year may continue a member by paying an annual fee of \$5.
- 2. On payment of \$100 any person may become a life member exempt from annual dues.
- 3. Foreign economists of distinction, not exceeding twenty-five in number, may be elected honorary members of the Association.
- 4. Every member is entitled to receive, as they appear, all reports and publications of the Association.

#### ARTICLE IV

#### OFFICERS

The officers of the Association shall be elected at the annual meeting and shall consist of a President, three Vice-Presidents, a Secretary, and a Treasurer, whose term of office shall be one

year; a Managing Editor whose term of office shall be three years; six members of the Editorial Board and six elected members of the Executive Committee, whose term of office shall be three years, and who shall be so classed that the term of two members of each committee shall expire each year; provided that the office of Secretary and that of Treasurer may be filled by the same person. The Executive Committee shall consist of the President, the Vice-Presidents, the Secretary, the Treasurer, the Chairman of the Editorial Board, the ex-Presidents, and six elected members.

#### ARTICLE V

#### DUTIES OF OFFICERS

1. The President of the Association shall preside at all meetings of the Association and of the Executive Committee, and in consultation with the Executive Committee, shall prepare the programs for the annual meetings. In case of his disability, his duties shall devolve upon the Vice-Presidents in the order of their election, upon the Secretary, and upon the Treasurer.

2. The Secretary shall keep the records of the Association and perform such other duties as the Executive Committee may as-

sign to him.

- 3. The Treasurer shall receive and have the custody of the funds of the Association, subject to the rules of the Executive Committee.
- 4. The Executive Committee shall have charge of the general interests of the Association in the interval between annual meetings. It may fill vacancies in the list of officers, and may adopt any rules or regulations for the conduct of its business not inconsistent with this constitution or with rules adopted at the annual meetings. It shall act as a committee on time and place of meetings and perform such other duties as the Association shall delegate to it. A quorum shall consist of five members, other than the Vice-Presidents and the ex-Presidents.

5. The Editorial Board shall have charge of the publications of the Association.

#### ARTICLE VI

#### AMENDMENTS

Amendments, after having been approved by a majority of the Executive Committee present at a meeting regularly called, may be adopted by a majority vote of the members present at any regular meeting of the Association.

#### LIST OF MEMBERS

\* Life Members

+ Subscribers

‡ Honorary Members

Note—The figures in parenthesis after the name of a member indicate the year from which dates his continuous membership.

ABBOTT, EDITH, Hull House, Chicago, Ill. (1905)

†Accounting Department, Wharton School, University of Pennsylvania, Philadelphia, Pa.

ADAMS, HENRY CARTER, 1421 Hill St., Ann Arbor, Mich. (1886)

ADAMS, JAMES F., Broad and 5th Sts., Phillipsburg, N. J. (1911)

ADAMS, ROMANZO, 735 West St., Reno, Nev. (1915)

ADAMS, THOMAS SEWALL, Yale University, New Haven, Conn. (1900)

ADLER, JEROME C., 527 Fifth Ave., New York City (1916)

ADLERBLUM, ISRAEL S., 370 West 116th St., New York City (1912)

+ADMINISTRATION DEPARTMENT, 402 Fulton St., Jamaica, N. Y.

ADRIANCE, WALTER MAXWELL, 45 Wiggins St., Princeton, N. J. (1904)

AGAR, JOHN G., 31 Nassau St., New York City (1909)

AGGER, EUGENB EWALD, Tenafly, N. J. (1902)

Agoos, Samuel L., 145 South St., Boston, Mass. (1916)

AINSWORTH, HARRY, Moline, Ill. (1911)

+AKADEMISKA BOKHANDELN, Helsingfors, Finland, Russia

AKERMAN, CLEMENT, University of Washington, Seattle, Wash. (1914)

+AKRON PUBLIC LIBRARY, Akron, Ohio

†AKTIEBOLAGET NORDISKA BOKHANDELN, Drottninggatan, Stockholm, Sweden

†ALABAMA, UNIVERSITY OF, LIBRARY, University, Ala.

†ALBION COLLEGE LIBRARY, Albion, Mich.

ALDRICH, MORTON ARNOLD, Tulane University, New Orleans, La. (1897)

ALEXANDER, MAGNUS W., General Electric Co., West Lynn, Mass. (1909)

†ALFRED UNIVERSITY READING ROOM, Alfred, N. Y.

ALLEN, BENJAMIN FRANKLIN, Lincoln Institute, Jefferson City, Mo. (1911)

ALLEN, FREDERICK L., 55 Cedar St., New York City (1909)

ALLEN, GEORGE HENRY HOWLAND, New Bedford, Mass. (1887)

ALLEN, J. BURNS, 3017 Grand Ave. South, Minneapolis, Minn. (1915)

ALLINSON MAY, 411 West 115th St., New York City (1912)

Allison, James Ekin, 300 Security Bldg., St. Louis, Mo. (1912)

ALLISON, JOHN MANDGRIDGE SNOWDEN, 10 Nassau St., Princeton, N. J. (1912)

+AMERICAN ELECTRIC RAILWAY ASSOCIATION, 8 West 40th St., New York City

†American Telephone and Telegraph Co., Information Department, Room 1451, 15 Dey St., New York City

†American Telephone and Telegraph Co., Library, Room 1351, 15 Dey St., New York City

AMES, CHARLES W., 501 Grand Ave., St. Paul, Minn. (1911)

†AMHERST COLLEGE LIBRARY, Amherst, Mass.

Amrath, J. W., 6778 Hollywood Blvd., Los Angeles, Calif. (1909)

Amster, Nathan L., 6 Hawes St., Brookline, Mass. (1909)

ANDERSON, ARTHUR E., Room 412, 31 W. Lake St., Chicago, Ill. (1913)

Anderson, Audley L., Box 1312, Houston, Texas (1914)

Anderson, Benjamin M., Jr., Harvard University, Cambridge, Mass. (1911)

Anderson, Frank F., 420 West 118th St., New York City (1910)

Anderson, George W., 85 Devonshire St., Boston, Mass. (1910)

Andrew, A. Piatt, Jr., Gloucester, Mass. (1896)

Andrews, Frank, Department of Agriculture, Washington, D. C. (1904)

Andrews, James Burton, College of Agriculture, Urbana, Ill. (1915)

Andrews, John B., 131 East 23d St., New York City (1910)

Arbuthnot, Charles Criswell, 2263 Demington Drive, Cleveland, Ohio (1904)

†ARKANSAS, UNIVERSITY OF, LIBRARY, Fayetteville, Ark.

\*Armstrong, H. C., Jr., 1012 N. Palafax St., Pensacola, Fla. (1887)

Armstrong, S. T., Katonah, N. Y. (1910)

ARNER, GEORGE B. L., 301 17th Ave., Columbus, Ohio (1909)

Arnold, John Knox, Federal Trade Commission, Washington, D. C. (1911)

Arnold, R. V., 3337 Oakland Ave., Minneapolis, Minn. (1913)

Asano, Ryozo, 625 Market St., San Francisco, Calif. (1914)

Ashley, R. L., 635 Prospect Square, Pasadena, Calif. (1911) Ashworth, John H., 159 Broadway, Gettysburg, Pa. (1915)

ATHERTON, JOHN M., Louisville, Ky. (1911)

ATKINS, EDWIN F., 10 Broad St., Boston, Mass. (1909)

ATKINS, PAUL Moody, 1400 Revard St., Detroit, Mich. (1915)

ATWOOD, ALBERT WILLIAM, 272 Nassau St., Princeton, N. J. (1912)

Austin, Charles B., 419 West 119th St., New York City (1911)

\*Avery, Elroy McKendree, 2831 Woodhill Road, S. E., Cleveland, Ohio (1893)

AVERY, SAMUEL P., 61 Woodland St., Hartford, Conn. (1910)

Awoki, T., Yokohama Specie Bank, 55 Wall St., New York City (1911)

BABCOCK, ALBERT L., Billings, Mont. (1914)

BABCOCK, L. C., The Yellowstone National Bank, Billings, Mont. (1912)

Babson, Roger W., 31 Abbott Road, Wellesley Hills, Mass. (1910)

BACAS, PAUL E., 113 Waverly Place, New York City (1912)

BACHE, FRANK SEMAN, 42 Broadway, New York City (1912)

BACON, CHARLES F., 151 Tremont St., Boston, Mass. (1909)

BADGER, JOHN ALGERNON, 3311 Coliseum St., New Orleans, La. (1916)

Bagge, Gosta A., Nybrogatan 43, Stockholm, Sweden (1904)

BAGLEY, FREDERICK P., Geo. H. Morrill Co., Norwood, Mass. (1916)

Bailey, H. C., 1004 Electric St., North Park, Scranton, Pa. (1912)

BAILEY, WILLIAM BACON, 26 Edgewood Ave., New Haven, Conn. (1901)

Baily, Joshua L., 1508 Walnut St., Philadelphia, Pa. (1909)

BAKER, ALFRED L., 141 S. La Salle St., Chicago, Ill. (1909)

BAKER, EDWARD DONALD, 6148 Kimbark Ave., Chicago, Ill. (1912)

BAKER, EZRA HENRY, 23 Ames Bldg., Boston, Mass. (1911)

BAKER, JOHN H., 114 E. Jefferson St., Colorado Springs, Colo. (1911)

BAKER, JOHN WILLIAM, 4 Park St., Boston, Mass. (1911)

BAKER, OLIVER E., 3614 Newark St., N. W., Washington, D. C. (1916)

BAKER, R. H., Bankers Trust Co., Houston, Texas (1915)

BAKER, WILLIAM B., Atlantic Ice and Coal Co., Atlanta, Ga. (1909)

BALCH, EMILY GREENE, Wellesley, Mass. (1896)

BALCH, GORDON H., 147 Milk St., Boston, Mass. (1916)

BALCOM, ALFRED BURPEE, Wolfville, N. S., Can. (1914)

BALDWIN, FOY SPENCER, 230 Fifth Ave., New York City

BALDWIN, GEORGE B., Box 15, Appleton, Wis. (1916)

\*BALDWIN, SIMEON EBEN, 69 Church St., New Haven, Conn. (1893)

\*Baldwin, Summerfield, 1006 Charles St., Baltimore, Md. (1887)

BALDWIN, WILLIAM H., 1415 21st St., Washington, D. C. (1905)

BALLARD, LLOYD VERNOR, 915 Park Ave., Beloit, Wis. (1912)

BANCROFT, WILLIAM P., Wilmington, Del. (1910)

+BANGOR PUBLIC LIBRARY, Bangor, Me.

BARBOUR, WILLIAM T., Detroit Stove Works, Detroit, Mich. (1914)

BARD, HARRY ERWIN, 278 Hawthorne Ave., Yonkers, N. Y. (1910)

BARDO, C. L., Hotel Taft, New Haven, Conn. (1916)

BARKER, D. A., C/o King, King & Co., Bombay, India (1912)

Barlow, Burt E., Coldwater, Mich. (1913)

Barnes, Charles Maurice, Office of the Foreign Trade Advisers, Department of State, Washington, D. C. (1913)

BARNES, HORACE R., 24 E. Front St., Media, Pa. (1914)

BARNET, MORRIS S., Cor. Fulton and Gold Sts., New York City (1916)

BARNETT, GEORGE ERNEST, Johns Hopkins University, Baltimore, Md. (1901)

BARNS, WILLIAM EDDY, St. Louis, Mo. (1887)

BARR, GEORGE A., 206 Third Ave., Joilet, Ill. (1915)

BARRETT, DON CARLOS, Haverford, Pa. (1895)

BARRON, MARY LOUISE, 1122 South 52d St., Philadelphia, Pa. (1913)

BARROWS, WILLARD P., 1051 69th Ave., Oak Lane, Philadelphia, Pa. (1910)

BARUCH, B. M., 111 Broadway, New York City (1913)

BASHINSKY, E. H., Troy, Ala. (1914)

Bass, George A., Missouri Trust Bldg., St. Louis, Mo. (1911)

BATCHELLER, ROBERT, 723 15th St., N. W., Washington, D. C. (1887)

BATCHELOR, J. H., 27 Janssen Place, Kansas City, Mo. (1913)

+BATES COLLEGE LIBRARY, Lewiston, Me.

BAUER, JOHN, 269 Nassau St., Princeton, N. J. (1909)

+BAYLOR UNIVERSITY LIBRARY, Waco, Texas

Beal, Thomas A., 464 Douglas Ave., Salt Lake City, Utah (1909)

Beaman, George Herbert, 2232 Massachusetts Ave., Washington, D. C. (1910)

BEAMAN, REUBEN JOHN, 2143 Union Cent. Bldg., Cincinnati, Ohio (1914)

Beardsley, Charles, Clarks, Nebr. (1898)

Beckley, John N., Rochester, N. Y. (1915)

BECKWITH, HOLMES, 331 East 31st St., New York City (1910)

BEDFORD, SCOTT E. W., University of Chicago, Chicago, Ill. (1916)

Beecher, L. Wheeler, 986 Whalley Ave., New Haven, Conn. (1911)

BEER, GEORGE LOUIS, 329 West 71st St., New York City (1892)

BEHREND, BERNARD ARTHUR, 200 Devonshire St., Boston, Mass. (1911)

Belchen, Alice E., Milwaukee-Downer College, Milwaukee, Wis. (1910)

Belknap, William Burke, 1654 Massachusetts Ave., Cambridge, Mass. (1915)

Bell, James W., 467 Broadway, Cambridge, Mass. (1916)

Bell, Russell Davenport, 16 St. Sacrament St., Montreal, Que., Can. (1914)

Bell, Spurgeon, 2603 University Ave., Austin, Texas (1910)

Beller, William Frank, 51 East 123d St., New York City (1892)

†Beloit College Library, Beloit, Wis.

Belt, William Bradley Tyler, 19th and Douglas Sts., Omaha, Nebr. (1916) Beman, Lamar, T., 1939 East 86th St., Cleveland, Ohio (1906)

Bemis, A. Farwell, Chestnut Hill, Mass. (1909)

Bemis, Edward Webster, 4500 Beacon St., Chicago, Ill. (1886)

Bendix, Ludwig, Hallgarten & Co., 5 Nassau St., New York City (1912)

Benedict, Howard G., Anderson, Ind. (1913)

Benitez, Conrado, University of the Philippines, Manila, P. I. (1916)

Bennett, Edwin Eversley, 66 Broadway, New York City (1916)

Bennett, Henry W., 1242 State Life Bldg., Indianapolis, Ind. (1913)

Benson, Ernest R., 23 Bramhall St., Portland, Me. (1911)

Bergh, Herman Ritchie, 1540 Formosa Ave., Hollywood, Calif. (1916) Berglund, Abraham, University of Washington, Seattle, Wash. (1906)

Berkowitz, William, 1396 E. Parkway, Brooklyn, N. Y. (1915)

BERNHEIM, ISAAC W., Louisville, Ky. (1910)

Bernheim, Julius C., 129 West 79th St., New York City (1916)

Bernheimer, Charges S., Hopkinson and Sutter Sts., Brooklyn, N. Y. (1910)

Berry, Thomas L., Fidelity Bldg., Baltimore, Md. (1910)

Berryhill, James G., 2737 Claremont Blvd., Berkeley, Calif. (1890)

Bess, W. G., Leetonia, Ohio (1911)

Best, Alfred M., 100 William St., New York City (1916)

+BETHANY COLLEGE LIBRARY, Lindshorg, Kans.

Bethell, Union N., 15 Dey St., New York City (1911)

BETTMAN, ALFRED, 1514 First Natl. Bank Bldg., Cincinnati, Ohio (1914)

+Biblioteca Universitaria, 5 via Balbi, Genoa, Italy

+BIBLIOTHEK DEB NEDERLANDSCHE HANDELS-HOOGSCHOOL, Rotterdam, Holland

+Bibliotheque de L'Institut Agronomique, Voronege, Russia

+Bibliotheque de l'Institut Polytechnique, Sosnowka 3, Petrograd, Russia

†BIBLIOTHEQUE PUBLIQUE ET UNIVERSITAIRE, Geneva, Switzerland

BICKERDIKE, CHARLES FREDERICK, Hillsted, Hengrave Road, Forest Hill, London, S. E., Eng. (1913)

Biddle, William B., 1005 Frisco Bldg., St. Louis, Mo. (1914)

Bidgood, Lee, 1806 Broad St., Tuscaloosa, Ala. (1911)

BIDWELL, PERCY WELLS, 140 Cannes St., New Haven, Conn. (1912)

Bidwell, Raymond A., 35 Avon Place, Springfield, Mass. (1910)

BIGGS, JOHN S., Bureau of Corporations, Washington, D. C. (1912)

BILGRAM, HUGO, 1235 Spring Garden St., Philadelphia, Pa. (1887)

BILLQUIST, CARL EDWARD, 11 Broadway, New York City (1887)

Distriction, Care Edward, 11 Divadway, New York City (1887)

BINDER, RUDOLPH M., 64 Roosevelt Ave., East Orange, N. J. (1911)

BIRD, CHARLES S., East Walpole, Mass. (1909)

BIRD, FRANCIS HENRY, 2548 University Place, Washington, D. C. (1909)

+BIRMINGHAM PUBLIC LIBRARY, Birmingham, Ala.

BISHOP, AVARD LONGLEY, Yale University, New Haven, Conn. (1909)

BISHOP, GEORGE L., 27 State St., Boston, Mass. (1913)

\*BIXBY, WILLIAM HERBERT, 735 Southern Bldg., Washington, D. C. (1888)
BLACK, JAMES WILLIAM, 56 Pleasant St., Waterville, Me. (1894)

BLACK, JOHN W., Houghton, Mich. (1911)

BLACKMAN, WILLIAM ROBERT, 718 Hibernian Bldg., Los Angeles, Calif. (1910)

BLACKMAR, FRANK W., University of Kansas, Lawrence, Kan. (1888)

BLACKMER, JAMES L., 384 Ellicott Square, Buffalo, N. Y. (1913)

BLADES, JAMES B., New Bern, N. C. (1910)

Blaine, Anita McCormick (Mrs. Emmons), 101 E. Erie St., Chicago, Ill.

BLAIR, JOSEPH PAXTON, 165 Broadway, New York City (1914)

BLAIR-SMITH, H., 15 Dey St., New York City (1915)

BLAKE, EDWIN M., 1 Liberty St., New York City (1909)

BLAKEY, LEONARD S., Carnegie Institute of Technology, Pittsburgh, Pa. (1911)

BLAKEY, ROY G., University of Minnesota, Minneapolis, Minn. (1912)

Blanchard, Marshall F., 159 Upland Road, Cambridge, Mass. (1912)

Blanchard, Ralph Harrub, Logan Hall, University of Pennsylvania, Philadelphia, Pa. (1912)

BLISS, Z. W., Providence, R. I. (1912)

BLOOD, JOHN BALCH, 232 High St., Newburyport, Mass. (1914)

BLUE, FREDERICK KELLOGG, 1569 Masonic Ave., San Francisco, Calif. (1914)

BLYTH, CHARLES R., 704 Merchants Exchange Bldg., San Francisco, Calif. (1912)

BOBB, DWIGHT S., 1100 Fort Dearborn Bank Bldg., Chicago, Ill. (1912)

+Bocca, Fratelli, via Carlo Alberto 3, Turin, Italy

BODINE, SAMUEL T., Broad and Arch Sts., Philadelphia, Pa. (1897)

Bonio, Luigi, Rome, Italy (1888)

BOERICKE, HAROLD, Vanadium, Colo. (1915)

BOGART, ERNEST LUDLOW, 806 W. Oregon St., Urbana, Ill. (1897)

Boggs, Theodore Harding, Dartmouth College, Hanover, N. H. (1911)

Boles, Edgar Howard, 143 Liberty St., New York City (1912)

Bolger, William A., Sorin Hall, Notre Dame, Ind. (1912)

Bolles, Albert S., Haverford College, Haverford, Pa. (1886)

BOLTON, CHARLES E., The Chesapeake & Ohio Ry. Co., Richmond, Va. (1915)

Bonar, James, The Mint, Ottawa, Ont., Can. (1910)

BONBRIGHT, JAMES C., 606 West 122d St., New York City (1915)

BONWIT, PAUL J., Fifth Ave. and 38th St., New York City (1916)

Borden, Sir Robert Laird, K. C., 201 Wurtemburg St., Ottawa, Ont., Can. (1913)

Borg, Sidney C., 20 Nassau St., New York City (1901)

Bosley, William Bradford, 445 Sutter St., San Francisco, Calif. (1916)

+Boston Athenaeum, Beacon St., Boston, Mass.

+Boston Public Library, Copley Square, Boston, Mass.

BOUCKE, OSWALD F., State College, Pa. (1911)

Boudin, Louis B., 203 Broadway, New York City (1912)

BOUGHEY, FRANK M., 4211 Ellis Ave., Chicago, Ill (1911)

BOURN, A. O., Bristol, R. I. (1912)

BOWDOIN COLLEGE LIBRARY, Brunswick, Me.

\*Bowen, Clarence Winthrop, 5 East 63d St., New York City (1886)

Bowen, Ezra, IV, Psi U. House, South Bethlehem, Pa. (1914)

Bowen, J. Chester, Bureau of Labor Statistics, Washington, D. C. (1901)

Bowerman, George F., Public Library, Washington, D. C. (1908)

BOWERS, JOHN WILDER, Portland, Me. (1909)

+Bowes & Bowes, 1 Trinity St., Cambridge, Eng.

\*Bowker, Richard Rogens, 241 West 37th St., New York City (1887)

BOWMAN, D. ARTHUR, Third Natl. Bank Bldg., St. Louis, Mo. (1909)

- BOWMAN, HAROLD M., 938 Centre St., Newton Centre, Mass. (1905)
- BOWMAN, S. H., JR., Lumber Exchange Bldg., Minneapolis, Minn. (1914)
- BOYDEN, RONALD W., 60 State St., Boston, Mass. (1909)
- BOYDEN, WILLIAM C., Winnetka, Ill. (1912)
- BOYLE, JAMES ERNEST, Agricultural College, N. Dak. (1905)
- BOYNTON, ARTHUR J., 1135 Ohio St., Lawrence, Kan. (1908)
- Brackenbidge, M. Eleanor, R. F. D. 3, San Antonio, Texas (1910)
- Brackett, Jeffrey R., 41 Marlboro St., Boston, Mass. (1904)
- Bradford, Ernest Smith, Federal Trade Commission, Washington, D. C. (1910)
- Bradley, Fred T., Box 689, New Haven, Conn. (1911)
- Bradley, Harriet, Governor's Island, N. Y. (1915)
- Bradley, M. C., 28 Jason St., Arlington, Mass. (1910)
- Bradley, Richards M., 216 Beacon St., Boston, Mass. (1912)
- Brady, Arthur W., Anderson, Ind. (1909)
- Brainard, John Morgan, 122 Genessee St., Auburn, N. Y. (1911)
- Braley, Henry K., 151 Kilsyth Road, Boston, Mass. (1910)
- Brand, Charles J., U. S. Department of Agriculture, Washington, D. C. (1914)
- Brandenburg, S. J., Miami University, Oxford, Ohio (1911)
- Brandt, Harry J., 15 Dey St., New York City (1912)
- Brandt, Lilian, 105 East 22d St., New York City (1909)
- DE Bray, A. J., Ecole des Hautes Etudes Commerciales, Montreal, Que, Can. (1916)
- BRECKENRIDGE, Miss S. P., 2559 Michigan Ave., Chicago, Ill. (1909)
- Breed, Howard, 1227 West 8th St., Cincinnati, Ohio (1912)
- Breed, William C., 32 Liberty St., New York City (1916)
- Breedlove, Joseph Penn, Trinity College, Durham, N. C. (1904)
- BRENNAN, THOMAS, 844 Tremont Bldg., Boston, Mass. (1911)
- BREBETON, T. C., Box 19, Carnduff, Sask., Can. (1916)
- Brewer, Edward M., 27 Kilby St., Boston, Mass. (1909)
- Brewster, Frederick F., 840 Whitney Ave., New Haven, Conn. (1911)
- Briggs, W. A., Box 667, Sacramento, Calif. (1911)
- BRINDLEY, JOHN E., Iowa State College, Ames, Iowa (1908)
- Busco, Norris A., Iowa State University, Iowa City, Iowa (1906)
- Bristol, John I. D., Metropolitan Bldg., 1 Madison Ave., New York City (1915)
- BRITTIN, L. H., Hampshire Arms, Minneapolis, Minn. (1913)
- BROCK, J. E., Mississippi Valley Trust Co., St. Louis, Mo. (1910)
- Bronson, Samuel L., New Haven, Conn. (1890)
- BROOKINGS, ROBERT S., Samuel Cupples W. W. Co., St. Louis, Mo. (1910)
- †Brooklyn Public Library, 26 Brevoort Place, Brooklyn, N. Y.
- †BROOKMIRE ECONOMIC SERVICE, THE, 56 Pine St., New York City
- Brookmire, James H., 4970 Berlin Ave., St. Louis, Mo. (1909)
- BROOKS, CHARLES EDWARD, 2563 Martiny Ave., Berkeley, Calif. (1916)
- Brooks, John Graham, 8 Francis Ave., Cambridge, Mass. (1887)
- Brooks, Joseph Judson, Penn. Co., Union Station, Pittsburgh, Pa. (1912)
- Brown, Charles W., Frick Bldg., Pittsburgh, Pa. (1912)
- BROWN, CLARENCE A., 229 West 57th St., New York City (1914)

BROWN, DICKSON Q., 160 West 59th St., New York City (1912)

BROWN, ELMER J., University of Arizona, Tucson, Ariz. (1911)

BROWN, FLEMING & MURRAY, 175 W. George St., Glasgow, Scotland

Brown, Francis Shunk, 5927 Drexel Road, Philadelphia, Pa. (1910)

BROWN, FRANKLIN Q., 33 Pine St., New York City (1911)

Brown, Harry Gunnison, 207 S. Garth Ave., Columbia, Mo. (1909)

Brown, Herbert D., 326 Winder Bldg., Washington, D. C. (1916)

BROWN, HERBERT JENKINS, Berlin Mills Co., Portland, Me. (1909)

BROWN, JACOB F., 274 Summer St., Boston, Mass. (1909)

BROWN, ORSON B., Berlin, N. H. (1913)

BROWN, PRENTISS M., Box 450, St. Ignace, Mich. (1915)

BROWN, REGINALD L., Bureau of the Census, Washington, D. C. (1912)

Brown, T. Wistar, 108 South 4th St., Philadelphia, Pa. (1916)

+BROWN UNIVERSITY LIBRARY, Providence, R. I.

BROWN, W. GORDON, 269 Nassau St., Princeton, N. J. (1914)

BRUMMER, LEON, 277 Broadway, New York City (1901)

BRYAN, ENOCH A., State College, Pullman, Wash. (1911)

BRYAN, JOHN STEWART, The News Leader, Richmond, Va. (1911)

BRYAN, SAMUEL, Railroad Commission, Madison, Wis. (1914)

BRYANT, EDWARD SOHIER, U. S. Forest Service, Washington, D. C. (1912)

+BRYN MAWR COLLEGE LIBRARY, Bryn Mawr, Pa.

BUCKHOUS, M. GERTRUDE, University of Montana, Missoula, Mont. (1909)

BUCKMINSTER, WILLIAM R., 450 Tremont Bldg., Boston, Mass. (1913)

BUCKNELL UNIVERSITY LIBRARY, Lewisburg, Pa.

BUCKWALTER, T. V., 1041 Second Ave., Altoona, Pa. (1913)

BUFFALO PUBLIC LIBRARY, Buffalo, N. Y.

Buie, Walter A., 15 Congress St., Boston, Mass. (1916)

BULKLEY, ERASTUS W., 683 West 7th St., Plainfield, N. J. (1910)

BULLIVANT, S. L., 301 Armory Place, Sault Ste. Marie, Mich. (1911)

Bullock, Charles E., Canton, Pa. (1909)

Bullock, Charles Jesse, Harvard University, Cambridge, Mass. (1894)

BULLOCK, THEODORE T., 549 North 95th St., Lincoln, Nebr. (1913)

BUNKER, GEORGE R., 421 N. Broadway, Yonkers, N. Y. (1913)

Bunting, C. E., Bunting Brass and Bronze Co., Toledo, Ohlo (1914)

BURBANK, HAROLD H., 3 Chauncey Terrace, Cambridge, Mass. (1909)

Burch, Lowell R., 52 Broadway, New York City (1915)

Burchell, Durward E., 110 West 40th St., New York City (1915)

+Bureau of Labor Statistics, Department of Labor, Albany, N. Y.

†Bureau of Statistics, Library of Labor Division, 256 State House, Boston, Mass.

†Bureau of the Census, Department of Commerce, Washington, D. C.

Burgess, Ernest Watson, The University of Chicago, Chicago, Ill. (1914)

Burgess, Samuel Allen, 5920 Etzel Ave., St. Louis, Mo. (1913)

Burke, C. M., 204 Fairmount Ave., Ithaca, N. Y. (1914)

BURKE, EDWARD, 316 Railroad Ave., Scranton, Pa. (1915)

BURKE, RONALD J., 3065 East Boulevard, Detroit, Mich. (1916)

BURKE, THOMAS, Burke Bldg., Seattle, Wash, (1910)

BURNSIDE, CHARLES V., 1418 Newton St., N. E., Washington, D. C. (1915)

Burroughs, F. A., Conway, S. C. (1916)

BURROUGHS, HARRY E., 83 Munroe St., Somerville, Mass. (1913)

Burt, Alonzo, 230 W. Washington St., Chicago, Ill. (1912)

BURTON, THEODORE E., United States Senate, Washington, D. C. (1912)

\*Bush, Inving T., 100 Broad St., New York City (1911)

Bushee, Frederick A., 812 14th St., Boulder, Colo. (1913) Butler, Mary Marshall, 263 Palisade Ave., Yonkers, N. Y. (1904)

BUTLER, S. T., 4012 Sheridan Road, Chicago, Ill. (1912)

BUTTERFIELD, KENYON LEACH, Amherst, Mass. (1903)

BYERS, ISAAC W., Iron River, Mich. (1916)

Byers, Morton L., 32 Nassau St., New York City (1911)

CAIN, JAMES W., Washington College, Chestertown, Md. (1914)

Caldwell, R. J., 456 Riverside Drive, New York City (1915) Caldwell, Robert G., Rice Institute, Houston, Texas (1913)

†California State Library, Sacramento, Calif.

†California, University of, Library, Berkeley, Cailf.

CALMAN, HENRY L., 100 William St., New York City (1912)

CALVERT, JOSEPH F., 1 Madison Ave., New York City (1908)

†CAMARA DE REPRESENTANTES, Biblioteca, Havana, Cuba.

†Cambray, R. & Company, 9 Hastings St., Calcutta, India

CAMERON, MERTON K., 27 Ware St., Cambridge, Mass. (1915)

†Cammermeyers Boghandel, Karl Johans Gade 41-43, Kristiania, Norway Camp, William R., West Raleigh, N. C. (1913)

Campbell, James A., 1348 Robson St., Vancouver, B. C., Can. (1915)

CAMPBELL, JAMES H., 1223 Park Bldg., Pittsburgh, Pa. (1912)

CAMPBELL, JOHN A., 379 W. State St., Trenton, N. J. (1915)

Campbell, Robert A., Heights Court Apartment, Ithaca, N. Y. (1908) Campbell, Walter J., International Y. M. C. A. College, Springfield, Mass.

(1913)

CANCE, ALEXANDER E., Massachusetts Agricultural College, Amherst, Mass.
(1908)

Cancio y Luna, Leopoldo, Abogado, Linea 130 A, Vedado, Havana, Cuba (1911)

CANNAN, EDWIN, 11 Chadlington Road, Oxford, Eng. (1913)

CAPEN, EDWARD WARREN, 146 Sargeant St., Hartford, Conn. (1906)

CAPLES, M. J., 50 East Broad St., Columbus, Ohio (1911) \*CAPP, SETH BUNKER, Box 2054, Philadelphia, Pa. (1912)

CARLTON, FRANK T., 409 Allen Place, Albion, Mich. (1905)

\*CARNEGIE, ANDREW, 2 East 91st St., New York City (1886)

†CARNEGIE FREE LIBRARY, Allegheny, Pa.

†CARNEGIE LIBRARY, THE, Atlanta, Ga. †CARNEGIE LIBRARY, THE, San Antonio, Texas

†CARNEGIE LIBBARY, Periodical Dept., Schenley Park, Pittsburgh, Pa.

CAROTHERS, NEIL, Graduate College, Princeton University, Princeton, N. J. (1914)

CARPENTER, F. H., 121 Franklin Ave., W., Minneapolis, Minn. (1912)

CARPENTER, NILES, 746 Forest Ave., Evanston, Ill. (1915)

CARPENTER, S. J., 8 West 40th St., New York City (1911) CARR, JAMES A., 510 Pine St., St. Louis, Mo. (1911)

†CARROLL COLLEGE LIBRARY, Waukesha, Wis.

CARROLL, DUDLEY DEWITT, Livingston Hall, Columbia University, New York City (1916) CARROLL, JAMES B., 234 Pearl St., Springfield, Mass. (1913)

CARROLL, J. MURRAY, 143 Wood St., Lewiston, Mc. (1913)

CARSTENS, C. C., 43 Mt. Vernon St., Boston, Mass. (1909)

CARTER, ROBERT A., 4 Irving Place, New York City (1912)

CARVER, THOMAS NIXON, Harvard University, Cambridge, Mass. (1893)

Case, J. Herbert, 1126 Martine Ave., Plainfield, N. J. (1916)

CASE, MILLS E., 236 Sixth Ave., Brooklyn, N. Y. (1910)

CASSINO, SAMUEL E., Salem, Mass. (1916)

CASTLE, ERNEST B., Hamilton Ave., Bronxville, N. Y. (1911)

CATLIN, WARREN B., 23 School St., Brunswick, Me. (1909)

CATOR, GEORGE, 509 Continental Bldg., Baltimore, Md. (1901)

CAUBLE, LAURA A., 628 West 114th St., New York City (1916)

+CAZENOVIA LIBRARY, Cazenovia, N. Y.

+CEDAR RAPIDS PUBLIC LIBRARY, Cedar Rapids, Iowa

CHADDOCK, ROBERT E., Kent Hall, Columbia University, New York City (1909)

CHAMBERLAIN, EDWIN, San Antonio, Texas (1912)

CHANDLER, F. T., 1338 Chestnut St., Philadelphia, Pa. (1912)

CHANDLER, HENRY ALFRED ERNEST, 390 Wadsworth Ave., New York City (1909)

CHAPMAN, MARVIN ABBOTT, 71 Broadway, New York City (1913)

CHAPMAN, RONALD ERIC, Edmonds, Wash. (1910)

Chapman, Sydney John, Burnage Lodge, Levenshulme, Manchester, Eng. (1910)

CHAPMAN, WILLIAM P., 154 Nassau St., New York City (1910)

CHAPPLE, CHARLES J., 2815 3d Ave., N., Billings, Mont. (1915)

CHASE, HARVEY STUART, 84 State St., Boston, Mass. (1902)

CHASE, SIMEON B., King Philip's Mills, Fall River, Mass. (1890)

CHASE, WILLIAM ARTHUR, 5958 Midway Park, Austin Sta., Chicago, Ill. (1911)

CHATFIELD-TAYLOR, H. C., 100 Washington St., Chicago, Ill. (1910)

CHEEK, Ross W., 55 Fifteenth Ave., Columbus, Ohio (1912)

\*CHEN, HUAN-CHANG, The Confucian Society, 1798 Haining Road, Shanghai, China (1909)

\*CHEN, SHAO-KWAN, Hartley Hall, Columbia University, New York City (1910)

CHERINGTON, PAUL T., 52 Concord Ave., Cambridge, Mass. (1909)

CHEW, Ny Poon, 809 Sacramento St., San Francisco, Calif. (1909)

+CHICAGO, CITY CLUB OF, 228 S. Clark St., Chicago, Ill.

+CHICAGO PUBLIC LIBRARY, Chicago, Ill.

+CHICAGO THEOLOGICAL SEMINARY LIBRARY, 1610 Warren Ave., Chicago, Ill.

CHILDS, WILLIAM H., 17 Battery Place, New York City (1915)

CHINDA, MASUYO, 1321 K. St., Washington, D. C. (1915)

CHIPMAN, MINER, Old South Bldg., Boston, Mass. (1913)

CHISHOLM, ARCHIBALD M., Duluth, Minn. (1916)

Chu, Chin, The Educational Association of Kiangsu, Siccawei Road, near the West Gate, Shanghai, China (1915)

+CINCINNATI PUBLIC LIBRARY, Cincinnati, Ohio

†CINCINNATI, UNIVERSITY OF, LIBRARY, Cincinnati, Ohio

CLAGHORN, KATE HOLLADAY, 105 East 22d St., New York City (1901)

CLAPP, CLIFT ROGERS, 60 State St., Boston, Mass. (1909)

CLARK, CHARLES F., 2215 Spruce St., Philadelphia, Pa. (1915)

CLARK, DAVID TAGGART, Williamstown, Mass. (1909)

CLARK, EARLE, 130 East 22d St., New York City (1912)

\*Clark, Edward Severin, 149 Broadway, New York City (1916)

CLARK, FRED E., 1110 W. Oregon St., Urbana, Ill. (1914)

CLARK, HARRY STANLEY, 870 D. Ave., Coronado, Calif. (1915)

CLARK, JOHN BATES, 465 West End Ave., New York City (1886)

CLARK, JOHN MAURICE, University of Chicago, Chicago, Ill. (1909)

\*Clark, John Spencer, 110 Boylston St., Boston, Mass. (1887)

\*Clark, Martin, 91 Erie Co. Bank Bldg., Buffalo, N. Y. (1887)

CLARK, ROBERT FRY, Pacific University, Forest Grove, Orc. (1914)

+CLARK UNIVERSITY LIBRARY, Worcester, Mass.

CLARK, VICTOR S., The Carnegie Institution, Washington, D. C. (1906)

CLARK, WALTER ERNEST, West Nyack, Rockland Co., N. Y. (1902)

CLARK, WILLIAM J., 30 Church St., New York City (1910)

CLARKE, JOHN H., University Club, Cleveland, Ohio (1911)

†CLEVELAND PUBLIC LIBRARY, Reference Department, Cleveland, Ohio

CLEWS, HENRY, 17 Broad St., New York City (1909)

CLOW, FREDERICK REDMAN, Oshkosh, Wis. (1894)

Coats, R. H., 176 Manor Ave., Rockliffe, Ottawa, Ont., Can. (1911)

†Coburn Library, Colorado College, Colorado Springs, Colo.

Cochrane, Alexander, 40 Central St., Boston, Mass. (1909)

Coffey, Walter Castella, Urbana, Ill. (1911)

COFFIN, C. A., 30 Church St., New York City (1910)

Cogswell, Ledyard, Jr., New York State Natl. Bank, Albany, N. Y. (1911)

COHEN, JULIUS HENRY, 111 Broadway, New York City (1910)

COHEN, SAM L., 115 Broadway, New York City (1912)

‡Соны, Gustav, Göttingen, Germany (1893)

COKE, HENRY C., Dallas, Texas (1911)

Cole, Arthur H., 42 Walker St., Cambridge, Mass. (1913)

Cole, Howard N., 10 High St., Boston, Mass. (1916)

Cole, William Morse, 55 Brewster St., Cambridge, Mass. (1908)

†College of the City of New York, St. Nicholas Terrace and 139th St., New York City

Collier, Barron G., 220 West 42d St., New York City (1912)

Collingwood, David F., 248 4th Ave., Pittsburgh, Pa. (1914)

†Colorado, University of, Library, Boulder, Colo.

COMINS, EDWARD PARKHURST, 200 Devonshire St., Boston, Mass. (1910)

COMINS, WALDO H., St. François, Mo. (1912)

COMMONS, JOHN ROGERS, University of Wisconsin, Madison, Wis. (1888)

Comstock, Alzada, Mount Holyoke College, South Hadley, Mass. (1914)

CONANT, LUTHER, JR., Room 402, 31 State St., Boston, Mass. (1915)

Conger, A. L., Fort Leavenworth, Kan. (1913)

†CONNECTICUT STATE LIBRARY, Hartford, Conn.

CONNER, BENJAMIN Howe, 32 Avenue de l'Opera, Paris, France (1916)

CONOVER, HOWARD JOHN, 1301 West 104th St., Cleveland, Ohio (1912)

Converse, Paul D., University of Pittsburgh, Pittsburgh, Pa. (1915)

CONWAY, THOMAS, JR., 156 Logan Hall, University of Pennsylvania, Philadelphia, Pa. (1915)

\*COOK, CHARLES C., 2222 6th St., N. W., Washington, D. C. (1893)

COOK, HOWARD HAMBLETT, 61 Broadway, New York City (1899)

COOKE, THORNTON, 201 East 37th St., Kansas City, Mo. (1911)

COOKINGHAM, EDWARD, Ladd & Tilton Bank, Portland, Ore. (1911)

COOLEY, CHARLES HORTON, University of Michigan, Ann Arbor, Mich. (1890)

+Cooley & Marvin Co., Tremont Bldg., Boston, Mass.

COOLIDGE, ELLEN W., 81 Marlboro St., Boston, Mass. (1911)

COOLIDGE, SHERMAN, Faribault, Minn. (1913)

COONLEY, PRENTISS L., 39th St. and Stewart Ave., Chicago, Ill. (1914)

COPELAND, MELVIN T., 69 Walker St., Cambridge, Mass. (1909)

CORNELL UNIVERSITY LIBRARY, Ithaca, N. Y.

CORNING, CHRISTOPHER R., 36 Wall St., New York City (1914)

CORWIN, HORTON, JR., Edenton, N. C. (1911)

COTTON, WILLIAM J. H., Green Hill Lane, Henry Clay P. O., New Castle Co., Del. (1911)

COUCH, BENJAMIN W., 72 N. Main St., Concord, N. H. (1914)

COULTER, JOHN L., West Virginia University, Morgantown, W. Va. (1908)

Cousins, Thomas Flint, 373 DeKalb Ave., Brooklyn, N. Y. (1912)

COWARD, W. J., 119 West 40th St., New York City (1915)

COWDERY, EDWARD G., 157 Michigan Ave., Chicago, Ill. (1901)

Cowl, Donald H., 20 West 14th St., New York City (1916)

Cox, EDWARD V., 15 Dey St., New York City (1911)

COX, GEORGE CLARKE, 401 West 118th St., New York City (1911)

Cox, Robert Lynn, 165 Broadway, New York City (1910)

COYAGEE, J. C., 67 Ezra St., Calcutta, India (1913)

CRANE, CHARLES R., 70 Fifth Ave., New York City (1901)

Crawford, George G., Tennessee Coal, Iron and R. R. Co., Birmingham, Ala. (1911)

CRAWFORD, LEWIS F., Sentinel Butte, N. Dak. (1912)

CRIDER, GEORGE A., 1931 Chestnut St., Philadelphia, Pa. (1910)

CROCKER, FRANK L., 5 Nassau St., New York City (1909)

CROLY, HERBERT, Windsor, Vt. (1911)

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CROMPTON, GEORGE, 74 William St., Worcester, Mass. (1912)

CROOK, JAMES WALTER, Amherst, Mass. (1892)

CROSS, IRA BROWN, 1418 LeRoy Ave., Berkeley, Calif. (1909)

CROSSETT, EDWARD C., Davenport, Iowa (1911)

CROWELL, JOHN FRANKLIN, 65 Liberty St., New York City (1888)

CROWTHER, HERBERT S., 210 23d St., Ogden, Utah (1914)

CROXTON, FRED C., Industrial Commission of Ohio, Columbus, Ohio (1911)

CRUIKSHANK, ALFRED B., 43 Cedar St., New York City (1909)

Сирмове, S. A., University of Toronto, Toronto, Ont., Can. (1911)

Culbertson, J. J., Interstate Cotton Seed Crushers Ass'n, Paris, Texas (1916)

Culbertson, William S., 212 Maryland Ave., N. E., Washington, D. C. (1908)

Cumberland, William Wilson, 24 Graduate College, Princeton, N. J. (1916) Cummings, John, 1006 Park Road, N. W., Washington, D. C. (1896)

CUMMINS, ALBERT W., Wilmington, Del. (1910)

CUNNINGHAM, WILLIAM J., 28 Buckingham St., Cambridge, Mass. (1912)

CURRIER, GUY W., 84 State St., Boston, Mass. (1910)

CURTIS, GEORGE LEWIS, Clinton, Iowa (1916)

CURTISS, ELMER L., 89 State St., Boston, Mass. (1915)

CUSHING, GRAFTON DULANY, 719 Barristers Hall, Boston, Mass. (1910)

CUSHMAN, CHARLES F., 346 Broadway, New York City (1909)

Cusick, Laurence F., 168 Willow Road, Nahant, Mass. (1916)

Custis, Vanderveer, 4746 18th Ave., N. E., Seattle, Wash. (1904)

CUTLER, JAMES G., Rochester, N. Y. (1911)

CUTTING, R. FULTON, 32 Nassau St., New York City (1894)

DAGGETT, STUART, University of California, Berkeley, Calif. (1906)

Daish, John Broughton, 723 15th St., N. W., Washington, D. C. (1887)

†DAKOTA WESLEYAN UNIVERSITY, Mitchell, S. Dak.

†Dallas Public Library, Dallas, Texas

DANIELS, WINTHROP MORE, Interstate Commerce Commission, Washington, D. C. (1894)

DANKER, DANIEL J., 73 Dean Road, Brookline, Mass. (1913)

†DARTMOUTH COLLEGE LIBRARY, Hanover, N. H.

DAVENPORT, HERBERT JOSEPH, Cornell University, Ithaca, N. Y. (1905)

DAVIES, EMIL, British Foreign and Colonial Corporation, 57 Bishopsgate, London, E. C., Eng. (1911)

DAVIES, JOSEPH E., 2117 LeRoy Place, Washington, D. C. (1914)

\*DAVIS, ANDREW McFARLAND, 10 Appleton St., Cambridge, Mass. (1901)

DAVIS, EDGAR B., 1330 Main St., Campello, Mass. (1913)

DAVIS, EDMUND S., 15 Beacon St., Boston, Mass. (1912)

DAVIS, EDWARD HATTON, West Lafayette, Ind. (1902)

\*Davis, Horace, 1800 Broadway, San Francisco, Calif. (1911)

DAVIS, JOSEPH STANCLIFFE, 44 Conant Hall, Cambridge, Mass. (1911)

DAVIS, NATHANIEL FRENCH, 159 Brown St., Providence, R. I. (1909)

DAVIS, PIERPONT V., 851 N. Broad St., Elizabeth, N. J. (1912)

DAVIS, ROBERT C., 387 High St., Fall River, Mass. (1915)

DAVIS, WARREN J., Racine, Wis. (1911)

Dawson, Miles M., 141 Broadway, New York City (1911)

DAY, ARTHUR MORGAN, Danbury, Conn. (1899)

DAY, CLIVE, 44 Highland St., New Haven, Conn. (1908)

DAY, EDMUND E., 32 Avon Hill St., Cambridge, Mass. (1907)

DAY, EDWARD A., 765 Broad St., Newark, N. J. (1910)

DAY, HENRY B., 321 Chestnut St., West Newton, Mass. (1909)

DAYTON, D. D., 2500 Blaisdell Ave., Minneapolis, Minn. (1912)

†DAYTON PUBLIC LIBRARY, Dayton, Ohio

\*Dean, Charles A., Dean Bldg., 60 India St., Boston, Mass. (1901)

DEAN, M. A., P. O. Drawer Z, Chicago, Ill. (1910)

DE BOWER, HERBERT F., 315 Dearborn St., Chicago, Ill. (1910)

DECKER, MARTIN S., Public Service Commission, Albany, N. Y. (1910)

DE Cou, WILLIAM, JR., 219 Gowan Ave., Philadelphia, Pa. (1913)

Defoe, Luther Marion, 810 Virginia Ave., Columbia, Mo. (1911)

DE FOREST, EUGENE, 255 Edwards St., New Haven, Conn. (1916)

DE FOREST, ROBERT W., 7 Washington Square, New York City (1901)

Deibler, F. S., Evanston, Ill. (1908)

DE LEON, EDWIN, 2211 Broadway, New York City (1909)

DEMPSEY, JAMES H., 1201 Leader-News Bldg., Cleveland, Ohio (1911)

DENNIS, L., 49 Ridge St., Orange, N. J. (1910)

- DENNISON, HENRY S., Framingham, Mass. (1911)
- +DENVER PUBLIC LIBRARY, Denver, Colo.
- +Department Governor, The, Zamboanga, P. I.
- +Defartment of Archives and History, Legislative Reference Bureau, Charleston, W. Va.
- +DEPARTMENT OF LABOUR, Ottawa, Ont., Can.
- DERN, GEORGE H., 36 H St., Salt Lake City, Utah (1912)
- DERR, CHARLES H., Baldwin, Kan. (1909)
- DESJARDINS, ALPHONSE, Levis, Que., Can. (1913)
- +DES MOINES PUBLIC LIBRARY, Des Moines, Iowa
- +DETREN & ROCHOLL, LIBRERIA, Piazza Plebescito, Rome, Italy
- +DETROIT PUBLIC LIBRARY, Detroit, Mich.
- DEVEREAUX, EDMUND L., 607 Concord Bldg., Portland, Ore. (1915)
- DEVEREUX, FRANK G., Kezar Falls, Me. (1916)
- DEVEREUX, FREDERICK L., 195 Broadway, New York City (1911)
- \*DEVINE, EDWARD THOMAS, 607 Kent Hall, 116th St. and Amsterdam Ave., New York City (1893)
- Dewey, Davis Rich, Massachusetts Institute of Technology, Boston, Mass. (1886)
- DEWEY, F. A., 12 Charles St., New York City (1913)
- DEWEY, FRANCIS H., JR., 311 Main St., Worcester, Mass. (1915)
- DEWING, ARTHUR STONE, 27 Old Sloan Hall, New Haven, Conn. (1911)
- DEWSNUP, ERNEST RITSON, 812 West Hill St., Champaign, Ill. (1909)
- DICKEY, WALTER S., 200 New York Life Bldg., Kansas City, Mo. (1914)
- \*DILL, ARTHUR C., Winter Park, Fla. (1907)
- DISSTON, WILLIAM D., Chestnut Hill, Philadelphia, Pa. (1914)
- Dix, S. M., 45 Nassau St., New York City (1910)
- DIXON, FRANK HAIGH, Dartmouth College, Hanover, N. H. (1894)
- Dodds, Alexander, 1349 Westlake Ave., Los Angeles, Calif. (1912)
- Dodge, Cleveland H., 99 John St., New York City (1914)
- tvan Doesburgh, S. C., Breestraat 14, Leiden, Netherlands
- DOHERTY, HENRY L., 60 Wall St., New York City (1909)
- DOHRMANN, A. B. C., Geary and Stockton Sts., San Francisco, Calif. (1915)
- Domeratzky, Louis, Bureau of Manufactures, Washington, D. C. (1908)
- DONALD, WILLIAM JOHN ALEX., McMaster University, Toronto, Ont., Can. (1912)
- DONHAM, WALLACE B., 3 Ames Bldg., Boston, Mass. (1909)
- Donovan, William F., Mattapoiset, Mass. (1912)
- DOTEN, CARROLL W., 58 Garfield St., Cambridge, Mass. (1902)
- Douglas, A. W., 900 Spruce St., St. Louis, Mo. (1914)
- Douglas, Charles H., 245 West 39th St., New York City (1909)
- Douglas, James, 99 John St., New York City (1911)
- Douglas, Lewis Williams, Douglas, Ariz. (1916)
- Douglas, Paul Howard, 84 Prescott St., Cambridge, Mass. (1915)
- Dowell, Edward Samuel, State Normal School, Macomb, Ill. (1914)
- Downey, Ezekiel Henry, 2133 Green St., Harrisburg, Pa. (1911)
- Downs, William Charles, American Embassy, Rio de Janeiro, Brazil (1912)
- DREHER, H. J., 55 Wall St., New York City (1911)
- DREW, WALTER, 286 Fifth Ave., New York City (1912)

†DREXEL INSTITUTE LIBRARY, Philadelphia, Pa.

\*Droppers, Garrett, Williamstown, Mass. (1902)

DRURY, HORACE B., 140 E. Blake Ave., Columbus, Ohio (1915)

Du Bois, Charles G., 195 Broadway, New York City (1911)

Dudley, Arthur S., 1108 Majestic Bldg., Milwaukee, Wis. (1914)

DUFFY, WALTER F., Franklin, N. H. (1915)

DUMMER, ETHEL S. (Mrs. Wm. Francis), 679 Lincoln Parkway, Chicago, Ill. (1910)

Duncan, Carson S., University of Chicago, Chicago, Ill. (1915)

Duncan, John C., University of Cincinnati, Cincinnati, Ohio (1906)

Duncan, Kenneth, Canton Christian College, Canton, China (1915)

DUNHAM, ARTHUR L., 38 Hampden Hall, Cambridge, Mass. (1915)

\*Dunham, Carroll, Irvington-on-Hudson, N. Y. (1912)

DUNHAM, CARROLL, 3D, P. O. Box 1180, Savannah, Ga. (1915)

DUNN, SAMUEL O., 608 S. Dearborn St., Chicago, Ill. (1911)

DUNNE, PETER F., 3905 Clay St., San Francisco, Calif. (1911)

DURAND, EDWARD DANA, University of Minnesota, Minneapolis, Minn. (1898)

†DYMOCKS ВООК АВСАDE, LTD., 428 George St., Sydney, New South Wales, Australia

DYSON, H. W., B. C. Electric Railway Co., Vancouver, B. C., Can. (1914)

EAMES, ALFRED W., JR., Wahiawa, Oahu, T. H. (1912)

EARP, EDWIN LEE, Drew Theological Seminary, Madison, N. J. (1909)

Easly, Walter Inving, 1523 25th St., Des Moines, Iowa (1913)

†East Asiatic Commercial Intelligence, South Manchuria Railway Co., Tokyo Branch, Marunouchi, Tokyo, Japan

Eastman, George, 900 East Avenue, Rochester, N. Y. (1910)

EASTMAN, SAMUEL C., Concord, N. H. (1910)

EAVENSON, HOWARD N., Gary, W. Va. (1911)

EAVES, LUCILE, 176 Huntington Ave., Boston, Mass. (1911)

EBERLE, GEORGE JACQUIN, South Hall, University of Wisconsin, Madison, Wis. (1916)

EBERSOLE, JOHN FRANKLIN, University of Minneapolis, Minneapolis, Minn. (1910)

†Economics Library, School of Mines, Box 1176, Johannesburg, Transvaal, South Africa

\*Eddy, Sarah James, Bristol Ferry, R. I. (1893)

PEDGEWORTH, FRANCIS Y., Oxford, Eng. (1893)

EDMONDS, FRANKLIN SPENCER, Central High School, Philadelphia, Pa. (1894)

EDWARDS, ALBA M., Bureau of the Census, Washington, D. C. (1908)

EDWARDS, ANNE K., 1304 Cass St., La Crosse, Wis. (1915)

EDWARDS, RICHARD E., Peru, Ind. (1914)

Effinger, Robert Chaig, 35 Claremont Ave., New York City (1915)

EGLESTON, MELVILLE, 26 Cortlandt St., New York City (1909)

EHRHORN, OSCAR W., 15 William St., New York City (1909)

EHRLE, OSCAR F., 102 Fulton St., New York City (1911)

EICEHOFF, HENRY, 604 Mills Bldg., San Francisco, Calif. (1910)

EIDLITZ, OTTO M., 489 Fifth Ave., New York City (1907) EITINGON, WALDEMAR, 45-51 West 25th St., New York City (1916)

ELDRED, WILFRED, Stanford University, Calif. (1911)

+ELIZABETH FREE PUBLIC LIBRARY, Elizabeth, N. J.

ELEUS, ABRAM I., 170 Broadway, New York City (1909)

ELLIOT, ARTHUR F., 66 Liberty St., New York City (1914)

ELLIOTT, CHARLES S., 1508 Topeka Ave., Topeka, Kan. (1911)

ELLIS, GEORGE H., West Newton, Mass. (1909)

ELLIS, GEORGE W., 149 Broadway, New York City (1910)

ELLIS, RALPH, 22 West 57th St., New York City (1911)

ELLIBON, WILLIAM B., 165 Broadway, New York City (1914)

Ellwood, Charles A., 407 College Ave., Columbia, Mo. (1901)

ELWELL, FAYETTE H., 2025 Chadbourne Ave., Madison, Wis. (1911) ELY, RICHARD THEODORE, University of Wisconsin, Madison, Wis. (1886)

ELY, ROBERT ERSKINE, 23 West 44th St., New York City (1903)

EMANUEL, JOHN H., JR., 120 Broadway, New York City (1916)

\*EMERICK, C. F., Northampton, Mass. (1907)

EMERSON, ELLIOT S., 395 Broadway, Cambridge, Mass. (1909)

EMERSON, HARRINGTON, 30 Church St., New York City (1911)

+EMERSON, T. R., SHOE Co., 148-150 Duane St., New York City

EMERSON, WILLIAM F., 121 Depot Road, Longmeadow, Mass. (1910)

+EMERY, HENRY CROSBY, Yale Station, New Haven, Conn. (1894)

+EMORY AND HENRY COLLEGE, Emory, Va.

ENGEL, EDWARD J., 6646 Woodlawn Ave., Chicago, Ill. (1914)

ENGLAND, Mrs. MINNIE THROOP, 1330 V. St., University Place, Nebr. (1906)

English, Donald, Cornell University, Ithaca, N. Y. (1911)

EPPLER, WILLIAM E., 671 Western Ave., Albany, N. Y. (1914)

ERLANGER, ABRAHAM, 65 Worth St., New York City (1914)

ESBERG, ALFRED I., 119 West 40th St., New York City (1911)

Esch, Fred Henry, Interstate Commerce Commission, Washington, D. C.

ESPE, THEODORE N., L. Box 1236, Salt Lake City, Utah (1914)

ESTABROOK, ARTHUR F., 15 State St., Boston, Mass. (1909)

ESTABROOK, HENRY D., 115 Broadway, New York City (1912)

ESTABROOK, LEON M., 1026 17th St., N. W., Washington, D. C. (1916)

ESTEY, JAMES A., 127 Waldron St., West Lafayette, Ind. (1916)

†ETZEL, WILLIAM, Librarian, St. Thomas College, St. Paul, Minn.

EVARTS, FRANK B., 11211 Bellflower Road, Cleveland, Ohio (1910)

EVERS, CECIL C., 186 Montague St., Brooklyn, N. Y. (1904)

EWEN, ALEXANDER C., Dean Academy, Franklin, Mass. (1911)

EWING, JOHN GILLESPIE, C/o Neal H. Ewing, Roselle, N. J. (1900)

EYERLY, ELMER K., University of South Dakota, Vermillion, S. Dak. (1914)

FAAST, BENJAMIN F., Eau Claire, Wis. (1915)

FAIRCHILD, ARTHUR BABBITT, Doane College, Crete, Nebr. (1901)

\*FAIRCHILD, CHARLES STEBBINS, Cazenovia, N. Y. (1896)

FAIRCHILD, FRED ROGERS, Yale University, New Haven, Conn. (1904)

FAIRLIE, JOHN ARCHIBALD, 1004 S. Lincoln Ave., Urbana, Ill. (1901)

FALCONER, JOHN I., 349 West 8th Ave., Columbus, Ohio (1914)

FALKNER, ROLAND P., 334 Metropolitan Tower, New York City (1912)

+FALL RIVER PUBLIC LIBRARY, Fall River, Mass.

FARNAM, HENRY WALCOTT, 43 Hillhouse Ave., New Haven, Conn. (1890)

FARNSWORTH, FREDERICK EUGENE, 11 Pine St., New York City (1911)

FARQUHAR, ARTHUR B., York, Pa. (1901)

FARQUHAR, HENRY, 1601 Park Road, Washington, D. C. (1896)

FAY, CHARLES R., Crescent Athletic Club, Brooklyn, N. Y. (1911)

FAY, SIDNEY BRADSHAW, 320 Elm St., Northampton, Mass. (1904)

FAY, WILLIAM RODMAN, 84 State St., Boston, Mass. (1913)

FAYANT, FRANK H., 70 East 45th St., New York City (1909)

+FEDERAL TRADE COMMISSION, Washington, D. C.

Fehlandt, August F., Ripon, Wis. (1915)

Feingold, Louis E., 340 Main St., Worcester, Mass. (1913)

Feiss, Paul L., 113 St. Clair St., Cleveland, Ohio (1904)

Fenner, Charles Payne, 708 Union St., New Orleans, La. (1911)

FERBER, J. BERNARD, Federal Bldg., Boston, Mass. (1909)

FERGUSON, HENRY, 123 Vernon St., Hartford, Conn. (1887)

\*FERGUSON, WILLIAM C., Richmond, Ind. (1888)

FETTER, FRANK ALBERT, 121 Broadmead, Princeton, N. J. (1894)

FIELD, ARTHUR S., 3607 Lowell St., Washington, D. C. (1906)

FIELD, E. B., P. O. Drawer 1708, Denver, Colo. (1910)

FIELD, JAMES ALFRED, University of Chicago, Chicago, Ill. (1904)

FILENE, A. LINCOLN, 416 Washington St., Boston, Mass. (1909)

Filene, Edward A., 416 Washington St., Boston, Mass. (1901)

FILLEBROWN, CHARLES BOWDOIN, 77 Summer St., Boston, Mass. (1896)

FINLEY, JOHN HUSTON, State Education Department, Albany, N. Y. (1893)

\*Fish, Stuyvesant, 52 Wall St., New York City (1909)

FISHER, CLYDE OLIN, Gatesville, N. C. (1916)

FISHER, IRVING, 460 Prospect St., New Haven, Conn. (1894)

FISHER, WILLARD CLARK, New York University, 32 Waverly Place, New York City (1890)

FITCH, JOHN A., Harbor Heights, Mamaroneck, N. Y. (1909)

FITCH, JOSEPH P., Oshkosh, Wis. (1912)

FITZGERALD, J. ANDERSON, Carnegie Institute of Technology, Pittsburgh, Pa. (1913)

FITZPATRICK, T. B., 104 Kingston St., Boston, Mass. (1909)

FLAGLER, JOHN H., 200 Broadway, New York City (1912)

FLEISHER, ALEXANDER, 133 West 11th St., New York City (1911)

FLEMING, R. D., 1732 W. Oxford St., Philadelphia, Pa. (1911)

Filess, R. A., 99 Claremont Ave., New York City (1911)

FLINT, JOHN, 50 Pine St., New York City (1911)

FLOCKEN, IRA G., University of Pittsburgh, Pittsburgh, Pa. (1909)

FORES, EDWIN F., 3 Chandler St., Lexington, Mass. (1912)

FORBSTER, ROBERT FRANZ, Emerson Hall, Harvard University, Cambridge, Mass. (1909)

Folwell, William Watts, 1020 5th St., S. E., Minneapolis, Minn. (1886) \*Foote, Allen Ripley, 315 Linwood Ave., Columbus, Ohio (1890)

+Forbes Library, Northampton, Mass.

FORD, JAMES, 35 Walker St., Cambridge, Mass. (1911)

FORD, WORTHINGTON CHAUNCEY, Massachusetts Historical Society, Boston, Mass. (1887)

FORDIAM, HERBERT L., Trinity Bldg., 111 Broadway, New York City (1910) FORDYCE, SAMUEL W., Commonwealth Trust Bldg., St. Louis, Mo. (1910)

DE FOREST, HENRY W., 30 Broad St., New York City (1911)

FORREST, J. DORSEY, 1321 N. Meridian St., Indianapolis, Ind. (1900)

FORT WAYNE PUBLIC LIBRARY, Fort Wayne, Ind.

Foss, W. J., 21st and Market Sts., Philadelphia, Pa. (1911)

\*FOSTER, E. H., Butterworth Farm, Foster, Ohio (1890)

FOSTER, SOLOMON, 264 Clinton Ave., Newark, N. J. (1910)

FOSTER, T. J., International Text Book Co., Scranton, Pa. (1912)

FOSTER, WILLIAM E., Providence Public Library, Providence, R. I. (1905)

FOWLER, RUFUS BENNETT, 3 Tuckerman St., Worcester, Mass. (1909)

Fox, Hugh F., 50 Union Square, New York City (1910)

FOYE, E. ELMER, Old Colony Trust Company, Boston, Mass. (1913)

FRADENBURGH, ADELBERT GRANT, Adelphi College, Brooklyn, N. Y. (1894)

FRAME, WILLIAM A., The Young-Quinlan Co., Minneapolis, Minn. (1915)

FRANCE, JOSEPH C., Continental Bldg., Baltimore, Md. (1911)

France, Joseph I., 15 W. Mt. Vernon Place, Baltimore, Md. (1911)

FRANKEL, DAVID J., 576 Fifth Ave., New York City (1916)

FRANKFORT, MAURICE, 200 Produce Exchange, New York City (1916)

FRANKLIN, FABIAN, The Evening Post, New York City (1892)

FRASER, GEORGE C., 20 Exchange Place, New York City (1915)

Frazer, George Enfield, University Club, 76 E. Monroe St., Chicago, Ill. (1914)

FREDERICKSEN, DITLEW M., 613 Phoenix Bldg., Minneapolis, Minn. (1910)

FREEHOFF, J. C., 830 West 179th St., New York City (1900)

FREEMAN, CLYTUS A., Bureau of the Census, Washington, D. C. (1914)

FREEMAN, HARRISON B., JR., 50 State St., Hartford, Conn. (1901)

FREER, HAMLINE H., Mount Vernon, Iowa (1893)

FRENCH, HERBERT F., 166 Essex St., Boston, Mass. (1909)

FREW, WALTER E., Corn Exchange Bank, New York City (1913)

FRICK, WILLIAM E., North Diamond Station, Pittsburgh, Pa. (1914)

FRIDAY, DAVID, New York University, Waverly Place, New York City (1910)

FRIEDMAN, H. G., 66 West 94th St., New York City (1908)

FRISSELL, ALGERNON S., 530 Fifth Ave., New York City (1916)

FUJIMOTO, KOTARO, Tokyo Higher Commercial School, Tokyo, Japan (1916)

+Fujita, Tsugao, 30 Haykunin-Cho, Okubo, Tokyo, Japan

+FURUDA, TOKUZO, 385 Sendagaya, Tokyo-Fu, Japan

†Fukusho Co., Ltd., No. 163 Yamagata-Dori, Dairen, Manchuria, China

Fullaway, C. H., The Ontario, Washington, D. C. (1915)

Fuller, Bert Cornelius, 380 Lewis Ave., Brooklyn, N. Y. (1916)

FULLER, GRACE PIERPONT, 366 Whalley Ave., New Haven, Conn. (1916)

\*Fuller, Paul, 2 Rector St., New York City (1887)

FULLER, RAYMOND G., The Evening Ledger, Independence Hall, Philadelphia, Pa. (1916)

FURNISS, EDGAR S., 916 Yale Station, New Haven, Conn. (1915)

FURTH, JACOB, 5243 Waterman Ave., St. Louis, Mo. (1914)

GAILEY, STEWART C., The Henry W. Oliver Bldg., Pittsburgh, Pa. (1912)

+GALESBURG PUBLIC LIBRARY, Galesburg, Ill.

GALLAHER, E. Y., Western Union Telegraph Co., New York City (1916)

GALLIVER, GEORGE A., 90 Magnolia Ave., Arlington, N. J. (1909)

Galloway, Lee, New York University School of Commerce, Washington Square, E., New York City (1908) Galpin, Henry L., 200 Livingston St., New Haven, Conn. (1911) Galt, George McF., 48 Mercer St., Princeton, N. J. (1915)

GAMMEL, ROBERT EDWARD, 620 Caxton Bldg., Cleveland, Ohio (1913) GARBER, EDWIN C., 3911 Walnut St., Philadelphia, Pa. (1915)

GARDINER, ROBERT H., Gardiner, Me. (1909)

GARDNER, FREDERICK D., 1821 Chouteau Ave., St. Louis, Mo. (1915)

Gardner, Henry Brayton, 54 Stimson Ave., Providence, R. I. (1886) Garfield, Harry A., Williams College, Williamstown, Mass. (1898)

Garrett, Robert, 506 Continental Trust Bldg., Baltimore, Md. (1904) Garst, Julius, Worcester, Mass. (1909)

Garvan, Francis P., 115 Broadway, New York City (1914)

GARVER, FREDERIC B., Stanford University, Calif. (1911)

GARVEY, BENJAMIN S., 212 W. Washington St., Chicago, Ill. (1911)

GATES, GAYLORD MERRITT, Mercersburg, Pa. (1916)

GATES, STANLEY, 60 Federal St., Boston, Mass. (1910)

GATES, W. H., Baldwin Chain and Mfg. Co., Worcester, Mass. (1915)

GAY, EDWIN FRANCIS, Harvard University, Cambridge, Mass. (1904)

Gellerstedt, L. L., Box 133, Birmingham, Ala. (1915)

George, Clark M., 127 N. Highland Ave., Pittsburgh, Pa. (1911)

†George Peabody College for Teachers, Library of, Nashville, Tenn. George, Ralph Everett, R. D., No. 1, Murdocksville, Pa. (1913)

George, W. D., People's Savings Bank Bldg., Pittsburgh, Pa. (1912)

†George Washington University Library, 2023 G. St., Washington, D. C. George, William Henry, Divinity Hall, Cambridge, Mass. (1909)

+Georgia, University of, Athens, Ga.

Gerhart, William Franklin, Washington University, St. Louis, Mo. (1905) Gerstenberg, Charles W., New York University, Washington Square, E., New York City (1909)

\*Gest, William Purves, Merion Station, Pa. (1905)

†GETTELMAN, VICTOR F., S. J., Jochi Daigaku, Kojimachi, Kioi-cho 7, Tokyo, Japan

GHOSH, H. HEMANTAKUMAR, 11 Wellington Square, Calcutta, India (1914)

†Gibson, H. D. W., 3491 Chancey St., Oakland, Calif. Gibson, William J., 32 Liberty St., New York City (1910)

GIDDINGS, FRANKLIN HENRY, 303 West 104th St., New York City (1886)

‡Gide, Charles, Faculté de Droit, Place de Panthéon, Paris, France (1892) Giesecke, Albert Anthony, Universidad del Cuzco, Cuzco, Peru (1907)

GIFFORD, W. S., 15 Dey St., New York City (1909)

Gilbert, James H., 1833 Alden St., Eugene, Ore. (1909)

GILBRETH, FRANK B., 77 Brown St., Providence, R. I. (1914)

GILMAN, STEPHEN W., 82 North Hall, University of Wisconsin, Madison, Wis. (1911)

GLASS, WILLIAM, The Republican, Fresno, Calif. (1911)

GLASSON, WILLIAM HENRY, Trinity College, Durham, N. C. (1902)

GLEN, JAMES F., Tampa, Fla. (1911)

GLENN, JOHN MARK, 136 East 19th St., New York City (1894)

GLICKSMAN, NATHAN, 485 Terrace Ave., Milwaukee, Wis. (1901)

GLOCKER, THEODORE WESLEY, University of Tennessee, Knoxville, Tenn. (1907) Gochenour, Ernest F., Moorefield, W. Va. (1909)

GODDARD, L. H., Department of Agriculture, Washington, D. C. (1913)

GODKIN, LAWRENCE, 36 West 10th St., New York City (1910)

GOEMANN, WALTER PAUL, Grantwood, N. J. (1914)

GOETZ, JACOB H., 531 Schenck Ave., Brooklyn, N. Y. (1914)

GOGAY, H. R., Solar Metal Products Co., Columbus, Ohio (1916)

Goldenweiser, Emanuel A., Office of Farm Management, Washington, D. C. (1911)

GOLDSMITH, MAX, Hartsdale, N. Y. (1916)

GOLDZIER, MORRIS, 657 Broadway, New York City (1912)

GOODELL, EDWIN BURPEE, Montclair, N. J. (1894)

GOODHUE, EVERETT WALTON, Colgate University, Hamilton, N. Y. (1905)

GOODMAN, DAVID, Bessemund Ave., Far Rockaway, N. Y. (1909)

GOODNOW, FRANK JOHNSON, Johns Hopkins University, Baltimore, Md. (1887)

+GOODRICH CO., THE B. F., LIBRARY OF, 2 Mill St., Akron, Ohio

Goodwin, William P., 33 Stimson Ave., Providence, R. I. (1911)

GORDON, LOUIS D., First Natl. Bank Bldg., San Francisco, Calif. (1916)

GORHAM, WILLIAM H., Box 263, Seattle, Wash. (1911)

GOULDER, HARVEY D., 915 Rockefeller Bldg., Cleveland, Ohio (1910)

GOVE, WILLIAM HENRY, 254 Lafayette St., Salem, Mass. (1891)

Gowin, Enoch B., New York University, Washington Square, E., New York City (1916)

Graetz, Victor, I Bartenkeingasse 2, Vienna, Austria (1901)

GRAM, JESSE P., 34 Nassau St., New York City (1911)

GRANT, PERCY S., 7 West 10th St., New York City (1912)

GRASS, DONALD FREDERIC, 170 Waverly St., Palo Alto, Calif. (1910)

GRAY, CORA E., 908 W. Oregon St., Urbana, Ill. (1912)

GRAY, EDITH S., Lord Cottage, Oberlin, Ohio (1912)

GRAY, EDWARD, 19 Stratford Place, Newark, N. J. (1909)

GRAY, HENRY A., Nor. Pac. Ry. Co., St. Paul, Minn. (1911)

GRAY, JOHN HENRY, University of Minnesota, Minneapolis, Minn. (1888)

GRAY, L. C., George Peabody College, Nashville, Tenn. (1911)

GRAY, R. S., 153 Kearny St., San Francisco, Calif. (1909)

GRAY, WILLIAM R., Hanover, N. H. (1911)

Green, Charles R., Library, Massachusetts Agricultural College, Amherst, Mass. (1909)

\*GREEN, DAVID I., Hartford, Conn. (1890)

GREENDLINGER, LEO, 32 Waverly Place, New York City (1909)

GREENLUND, W. A., 506 Williamson Bldg., Cleveland, Ohio (1914)

GREGORY, R. H., 463 West St., New York City (1914)

GREVE, CHARLES THEODORE, Maxwell Ave., Vernonville, Cincinnati, Ohio (1911)

\*GREY, ALBERT HENRY GEORGE, Earl, G. C. B., Howick, Lesbury, Northumberland, Eng. (1896)

GREY, DAVID L., 1320 Third Natl. Bank Bldg., St. Louis, Mo. (1910)

GRIES, JOHN M., 11 Bellevue Ave., Cambridge, Mass. (1910)

GRIFFENHAGEN, EDWIN O., 819 Junior Terrace, Chicago, Ill. (1912)

+GRINNELL COLLEGE LIBRARY, Grinnell, Iowa

GROAT, GEORGE GORHAM, University of Vermont, Burlington, Vt. (1903)

GRUNAUER, BERNHARD P., Grunauer & Co., Cleveland, Ohio (1914)

GUCKER, FRANK T., 3420 Hamilton St., Philadelphia, Pa. (1911)

GUDEKOONTE, J. F., Cor. Walnut and Water Sts., Peoria, Ill. (1915)

GULDLIN, OLAF N., Fort Wayne, Ind. (1911)

\*Gulick, John Thomas, E. Manoa Road, Honolulu, T. H. (1887)

GUNN, JAMES NEWTON, 43 Wall St., New York City (1910)

GUNNELL, WILLIAM J., 40 Vermont St., Buffalo, N. Y. (1911)

Guerschow, E. F., Schandauerstr., 68, Dresden, A 21, Germany (1911)

†HACKLEY PUBLIC LIBRARY, Muskegon, Mich.

HADLEY, ARTHUR TWINING, Yale University, New Haven, Conn. (1888)

HADLEY, W. A., Stroud, Okla. (1915)

HAFF, DELBERT JAMES, Kansas City, Mo. (1911)

HAGERMAN, H. J., Roswell, New Mex. (1916)

HAGERTY, JAMES EDWARD, Ohio State University, Columbus, Ohio (1902)

HAHNE, ERNEST H., Schaller, Iowa (1912)

Haig, Robert M., School of Journalism, Columbia University, New York City (1911)

HALE, ROBERT L., 12 East 85th St., New York City (1911)

HALL, EDWARD K., 101 Milk St., Boston, Mass. (1909)

Halligan, Howard A., 463 West St., New York City (1910)

Halsey, John Julius, Lake Forest, Ill. (1888)

Halsey, Olga S., 356 West 120th St., New York City (1914)

HAM, ARTHUR HAROLD, 130 East 22d St., New York City (1910)

Hamaoka, Itsuo, 55 Wall St., New York City (1915)

Hamili, Charles H., 105 W. Monroe St., Chicago, Ill. (1910)

Hamilton, Alice, Hull House, Chicago, Ill. (1911)

Hamilton, Walton H., Amherst, Mass. (1916)

Hamlin, Charles Sumner, 2 Raleigh St., Boston, Mass. (1900)

Hamlin, Philip, Box 1708, Denver, Colo. (1912)

HAMMOND, JOHN HAYS, 71 Broadway, New York City (1910)

HAMMOND, JOHN HENRY, 40 Wall St., New York City (1902)

HAMMOND, MATTHEW BROWN, Ohio State University, Columbus, Ohio (1894)

HANCOCK, GLOVER D., Lexington, Va. (1908)

HANCOX, G. G., Marlborough High School, Blenheim, New Zealand (1914)

HAND, LEARNED, U. S. Court House, New York City (1910)

†Handelshochschule, Munich, Bavaria

HANEY, LEWIS HENRY, University of Texas, Austin, Texas (1906)

HANKINS, FRANK HAMILTON, Clark College, Worcester, Mass. (1907)

\*HANKS, Mrs. C. STEDMAN, Manchester, Mass. (1888)

HANKS, ETHEL E., Children's Bureau, Washington, D. C. (1916)

†HANOVER COLLEGE LIBRARY, Hanover, Ind.

HARDEN, FRED G., Office of Public Roads, Department of Agriculture, Washington, D. C. (1911)

\*Harding, W. E., Bethany, N. Y. (1890)

HARDY, EDWARD R., 419 West 118 St., New York City (1911)

HARDY, FRANCIS A., The Hill, Augusta, Ga. (1912)

HARDY, GEORGE E., Linden Ave., Englewood, N. J. (1912)

HARNED, FRANKLIN M., 266 Lincoln Road, Brooklyn, N. Y. (1908)

HARPER, WILLIAM E., 430 College Ave., Appleton, Wis. (1915)

HARRIMAN, EDWARD A., 800 Second National Bank Bldg., New Haven, Conn.

HARRIS, HENRY J., Library of Congress, Washington, D. C. (1911)

HARRIS, N. W., 111-117 W. Monroe St., Chicago, Ill. (1911)

HARRIS, THOMAS L., Oxford, Ohio (1911)

HART, CHARLES H., 25 Broad St., New York City (1909)

HART, PATRICK HENRY, 1170 Broadway, New York City (1910)

HARVARD UNIVERSITY, LIBRARY OF, Cambridge, Mass.

†Harvard University, Library of, Department of Social Ethics, Emerson Hall, Cambridge, Mass.

HARVEY, WILLIAM D. B., 118 Main St., Hackettstown, N. J. (1914)

HASBROUCK, HENRY CRANE, 2151 12th St., Troy, N. Y. (1911)

HASSE, ADELAIDE R., 476 Fifth Ave., New York City (1914)

Hassinger, Luther C., Konnarock, Va. (1910)

HASTINGS, WILLIAM GRANGER, University of Nebraska, Lincoln, Nebr. (1904)

HATCH, LEONARD WILLIAMS, 140 S. Allen St., Albany, N. Y. (1901)

HATFIELD, HENRY RAND, University of California, Berkeley, Calif. (1898)

\*HATHAWAY, FRANK RANDEL, R. F. D. No. 2, Hudson, N. Y. (1888)

HATTON, WILLIAM H., New London, Wis. (1901)

HAVEMEYER, LOOMIS, 90 Wall St., New Haven, Conn. (1912)

HAVENER, PAUL, 623 Whitney Bldg, New Orleans, La. (1916)

+HAVERHILL PUBLIC LIBRARY, Haverhill, Mass.

HAWLEY, FREDERICK BARNARD, 82 Wall St., New York City (1888)

+HAYASHI, J., Orwood, Woodward Island, Calif.

HAYDEN, BRACE, Box 449, San Francisco, Calif. (1914)

HAYES, CARLTON J. H., Columbia University, New York City (1916)

HAYES, H. GORDON, University of Minnesota, Minneapolis, Minn. (1915)

HAYES, HORACE H., 34 Elm Hill Park, Roxbury, Mass. (1912)

HAYES, JOHN ROBERT, State Banking Department, Madison, Wis. (1910)

HAYHURST, EMORY R., State Board of Health, Columbus, Ohio (1915)

HAYNES, FRED E., State Historical Society, Iowa City, Iowa (1908)

HAYNES, GEORGE E., Fisk University, Nashville, Tenn. (1909)

HAZARD, BLANCHE EVANS, 811 E. State St., Ithaca, N. Y. (1912)

HAZARD, FREDERICK ROWLAND, Box 2, Syracuse, N. Y. (1902)

†HAZEN'S BOOKSTORE, 198 Main St., Middletown, Conn.

HEAD, C. B., Spring Valley Water Company, San Francisco, Calif. (1916)

Hebard, Grace Raymond, Library, University of Wyoming, Laramie, Wyo. (1913)

HEDRICK, WILBUR OLIN, East Lansing, Mich. (1909)

HEIGHO, EDGAR MAURICE, New Meadows, Idaho (1910)

Heilman, Ralph E., University of Illinois, Urbana, Ill. (1914)

Heiss, Charles A., 15 Dey St., New York City (1913)

†HELENA PUBLIC LIBRARY, Helena, Mont.

Hellman, Edgar A., 311 West 71st St., New York City (1913)

HEMMENS, HENRY J., 64 Wall St., New York City (1909)

HEMMEON, JOSEPH CLARENCE, McGill University, Montreal, Que., Can. (1909)

Henderson, Edward C., 58 East 54th St., New York City (1912)

Henderson, Joseph F., 117 Sycamore St., Evansville, Ind. (1915)

Henderson, Walter G., 3033 Queen St., Falls of Schuylkill, Philadelphia, Pa. (1910)

HENDRICKS, GEORGE B., Logan, Utah (1910)

HERSHFIELD, L. N., 11 Broadway, New York City (1911)

Herzog, Paul M., 233 Broadway, New York City (1909)

Hess, Herbert W., Logan Hall, University of Pennsylvania, Philadelphia, Pa. (1912)

Hess, Ralph Henry, University of Wisconsin, Madison, Wis. (1907)

Hewes, Amy, Mount Holyoke College, South Hadley, Mass. (1905)

HEYMAN, DAVID M., 309 West 86th St., New York City (1914)

Hibbard, B. H., College of Agriculture, Madison, Wis. (1908)

tHIERSEMANN, KARL W., Königstrasse 29, Leipzig, Germany

HIESTER, ANSLEM V., 320 Race Ave., Lancaster, Pa. (1900)

HIGHT, JAMES, Canterbury College, Christchurch, New Zealand (1912)

HILDEBRAND, EDWARD, 2158 Seventh Ave., New York City (1909)

HILL, DONALD MACKAY, 60 Federal St., Boston, Mass. (1909)

HILL, FRED B., Northfield, Minn. (1909)

HILL, JAMES A., 1 Broadway, New York City (1916)

HILL, JOSEPH ADNA, Bureau of the Census, Washington, D. C. (1887)

HILL, Lew C., 710 Harrison Ave., Boston, Mass. (1915)

Hill, Robert Tudor, Union College, Schenectady, N. Y. (1909)

HILL, WILLIAM, Bethany College, Bethany, W. Va. (1908)

HILLHOUSE, JAMES, Sachem's Wood, New Haven, Conn. (1909)

HIMMELBLAU, DAVID, 31 W. Lake St., Chicago, Ill. (1914)

HINCHLIFF, MARY E., 847 E. Colfax Ave., Denver, Colo. (1914)

HINE, CHARLES, Vienna, Fairfax Co., Va. (1912)

HINES, WALKER D., 52 William St., New York City (1903)

HIRAM COLLEGE, LIBRARY OF, HIRAM, Ohio

Hirsch, Karl, 52 Westendstrasse, Frankfort, a/M., Germany (1905)

HIRSCH, ROBERT BENEDICT, Hubbard Ave., Stamford, Conn. (1912)

HITCHCOCK, JOSEPH EDSON, Oberlin, Ohio (1915)

Hoagland, H. E., 62 Lancaster St., Albany, N. Y. (1910)

HOAGLAND, JOSEPH C., 16 William St., New York City (1911)

Hobson, John Atkinson, 3 Gayton Crescent, Hampstead, N. W., London, Eng. (1890)

†Hodges, J., Calle Harris, Olongapo, P. I.

Hodges, Le Roy, Petersburg, Va. (1912)

HOFFMAN, FREDERICK L., Prudential Insurance Co., Newark, N. J. (1906)

Hoggson, William J., 7 East 44th St., New York City (1911)

Hogle, James A., Scott Bldg., Salt Lake City, Utah (1911)

HOLCOMB, ALFRED E., 15 Dey St., New York City (1910)

HOLCOMBE, ARTHUR NORMAN, 21 Follen St., Cambridge, Mass. (1909)

HOLDEN, ARTHUR J., Bennington, Vt. (1910)

Holdsworth, John Thom, University of Pittsburgh, Pittsburgh, Pa. (1903)

HOLLANDER, JACOB H., Johns Hopkins University, Baltimore, Md. (1890)

Hollingshead, George G., 216 Third St., Jersey City, N. J. (1916)

Holmes, George K., Department of Agriculture, Washington, D. C. (1887)

HOLT, HENRY, 34 West 33d St., New York City (1889)

HOLT, PLINY E., The Holt Manufacturing Co., Stockton, Calif. (1914)

Hooker, Thomas, New Haven, Conn. (1911)

†Hope, James & Son, 63 Sparks St., Ottawa, Ont., Can.

HOPEWELL, JOHN, 273 Waverley Ave., Newton, Mass. (1912)

\*Hopkins, George B., 25 West 48th St., New York City (1909)

Hopkins, Louis J., Winnetka, Ill. (1911)

HOPSON, HOWARD C., 61 Broadway, New York City (1911)

tHorive, Kiichi, Tsuna-Machi, Mita, Shiba, Tokyo, Japan

HOTCHKISS, WILLARD EUGENE, 31 West Lake St., Chicago, Ill. (1902)

Hourwich, Isaac A., 180 Hewes St., Brooklyn, N. Y. (1901)

\*HOUSTON, SAMUEL FREDERICK, Chestnut Hill, Philadelphia, Pa. (1888)

HOWARD, EARL DEAN, Northwestern University, Evanston, Ill. (1905)

+HOWARD MEMORIAL LIBRARY, New Orleans, La.

HOWARD, STANLEY EDWIN, 23 Murray Place, Princeton, N. J. (1912)

Howe, Samuel T., 1925 West St., Topeka, Kan. (1894)

Howe, Walter B., Princeton, N. J. (1913)

Howell, Spencer Acklin, 2129 Scottwood Ave., Toledo, Ohio (1915)

Howes, Frank H., 248 Park St., Newton, Mass. (1909)

HOYT, ALLEN G., 150 West 79th St., New York City (1910)

HOYT, EDWARD R., Ogunquit, Me. (1912)

HUBBARD, JOSEPH BRADLEY, 54 Perkins Hall, Cambridge, Mass. (1914)

HUBBARD, WILLIAM PALLISTER, Nantucket, Mass. (1901)

Huebner, Grover G., Logan Hall, University of Pennsylvania, Philadelphia, Pa. (1914)

HUEBNER, SOLOMON, 516 South 44th St., Philadelphia, Pa. (1914)

HUGHES, H. F., Dime Bank Bldg., Detroit, Mich. (1916)

Hughes, John, 71 Broadway, New York City (1916)

HULL, CHARLES HENRY, Cornell University, Ithaca, N. Y. (1892)

Hummell, August, 250 Argyle Road, Brooklyn, N. Y. (1914)

HUMPHREY, LEWIS C., Douglas Boulevard, Louisville, Ky. (1913)

Hun, Marcus T., 25 N. Pearl St., Albany, N. Y. (1908)

Hunt, Rockwell D., University of Southern California, Los Angeles, Calif. (1908)

HUNT, WILLIAM C., Bureau of the Census, Washington, D. C. (1898)

HUNTER, MERLIN HAROLD, 705 S. Sixth St., Champaign, Ill. (1915)

HUNTINGTON, CHARLES CLIFFORD, R. 9, Springfield, Ohio (1905)

HUNTINGTON, FRANCIS C., 54 William St., New York City (1904)

†HURD, GEORGE E., Box 1777, Great Falls, Mont.

HURD, RICHARD M., 59 Liberty St., New York City (1897)

Husband, W. W., 3456 Macomb St., Washington, D. C. (1916)

HUSE, CHARLES PHILLIPS, 21 Pine St., Belmont, Mass. (1908)

HUSTON, FRANK M., 4838 Kenmore Ave., Chicago, Ill. (1911)

HUTCHINS, F. LINCOLN, Mount Royal Sta., B. & O. R. R., Baltimore, Md. (1908)

HUTCHINSON, EMILIE JOSEPHINE, 287 Carroll St., Brooklyn, N. Y. (1909)

HUTCHINSON, LINCOLN, Faculty Club, Berkeley, Calif. (1903)

HUTTON, WILLIAM M., George P. Ide & Co., Troy, N. Y. (1912)

HWANG, TZON FAH, 313 Livingston Hall, Columbia University, New York City (1915)

Hype, J. W., Springfield, Mass. (1915)

ICHIHASHI, YAMATO, Stanford University, Calif. (1911)

†IDAHO, UNIVERSITY OF, Moscow, Idaho

\*ILES, GEORGE, Public Library, Ottawa, Ont., Can. (1888)

†ILLINOIS DEPARTMENT OF FACTORY INSPECTION, Chicago, Ill.

- †ILLINOIS STATE LIBRARY, Springfield, Ill.
- †ILLINOIS STATE NORMAL UNIVERSITY LIBRARY, NORMAL, Ill.
- †ILLINOIS, UNIVERSITY OF, LIBRARY, Urbana, Ill.
- +Imperial Library, Tokyo, Japan
- †INDIANA STATE LIBRARY, Indianapolis, Ind.
- †Indiana University Library, Bloomington, Ind.
- +Indianapolis Public Library, Indianapolis, Ind.
- †INGHAM, MRS. E. C., San Fernando, Calif.
- INGRAHAM, OLIN, 230 West Gilman St., Madison, Wis. (1915)
- \*Insull, Samuel, 120 W. Adams St., Chicago, Ill. (1900)
- †IOWA STATE COLLEGE LIBRARY, Ames, Iowa
- †Iowa State Library, Legislative Reference Bureau, Capitol Bldg., Des Moines, Iowa
- +Iowa State University Library, Iowa City, Iowa
- IRVINE, ROBERT FRANCIS, University of Sydney, Sydney, N. S. W., Australia (1914)
- \*IRWIN, DUDLEY M., 71 Board of Trade, Buffalo, N. Y. (1890)
- ISAACS, I. SYDNEY, St. John, N. B. (1916)
- Ise, John, Ames, Iowa (1911)
- Ishida, Teiji, The Freight Dept., The Mitsui Bussan Kaisha, Kobe, Japan (1914)
- ISRAEL, HENRY, 124 East 28th St., New York City (1910)
- JACKMAN, WILLIAM T., 772 Markham St., Toronto, Ont., Can. (1909)
- Jackson, Dugald C., Massachusetts Institute of Technology, Boston, Mass. (1909)
- JACKSON, G. E., University of Toronto, Toronto, Ont., Can. (1911)
- JACKSON, R. B., Hudson Motor Co., Detroit, Mich. (1913)
- +Jacksonville Public Library, Jacksonville, Fla.
- Jacobson, Maurice L., Federal Reserve Board, Washington, D. C. (1894)
- JACOBSTEIN, MEYER, University of Rochester, Rochester, N. Y. (1909)
- JAHN, G., 223 West 46th St., New York City (1916)
- James, Albert Calder, University of Minnesota, Minneapolis, Minn. (1915)
- \*James, Edmund James, University of Illinois, Urbana, Ill. (1886)
- Janes, George M., University of Washington, Seattle, Wash. (1909)
- \*JAYNE, HENRY LABARRE, 503 Chestnut St., Philadelphia, Pa. (1887)
- JEFFCOTT, R. C., Somerville, N. J. (1915)
- JEIDELS, OTTO, 32 Behrenstr., Berlin, Germany (1911)
- Jenks, Jeremiah Whipple, Alexander Hamilton Institute, 13 Astor Place, New York City (1886)
- JENNINGS, CHARLES ELLIS, South Norwalk, Conn. (1911)
- JENNINGS, HENNEN, 2221 Massachusetts Ave., Washington, D. C. (1911)
- JENSEN, GEORGE CHARLES, Box 97, Elko, Nev. (1914)
- JENSEN, JENS, 815 Steinway Hall, Chicago, Ill. (1910)
- JEREMIAH, J., 117 West 58th St., New York City (1911)
- JERGENS, ANDREW, JR., Cincinnati, Ohio (1916)
- †JERSEY CITY FREE PUBLIC LIBRARY, Jersey City, N. J.
- Jevons, H. Stanley, University of Allahabad, Senate House, Allahabad, India (1915)
- JOHANNSEN, N., Rosebank, N. Y. (1905)

+JOHN CREBAR LIBRARY, Chicago, Ill.

JOHNSON, A. H., Praetorian Bldg., Dallas, Texas (1914)

JOHNSON, ALVIN SAUNDERS, 375 Hawthorne Ave., Palo Alto, Calif. (1901)

JOHNSON, EDGAR HUTCHINSON, Oxford, Ga. (1910)

\*JOHNSON, EMORY RICHARD, University of Pennsylvania, Philadelphia, Pa. (1893)

JOHNSON, FREDERICK, 30 East 42d St., New York City (1916)

JOHNSON, HOMER H., American Trust Bldg., Cleveland, Ohio (1913)

JOHNSON, JOSEPH FRENCH, 32 Waverly Place, New York City (1896)

JOHNSON, W. J., Lewiston, Mont. (1915)

JOHNSTON, ALLEN W., 500 State St., Schenectady, N. Y. (1910)

JOHNSTON, RICHARD H., Library, Bureau of Railway Economics, Washington, D. C. (1910)

Jones, Andrieus A., 2200 20th St., N. W., Washington, D. C. (1914)

Jones, Breckenbidge, 45 Portland Place, St. Louis, Mo. (1909)

Jones, Edward D., 625 Oxford Road, Ann Arbor, Mich. (1900)

JONES, ELIOT, University of Texas, Austin, Texas (1909)

JONES, EVERETT S., The Allen School, West Newton, Mass. (1909)

Jones, H. H., 1037 N. Delaware Ave., Philadelphia, Pa. (1916)

JONES, HOWEL, Topeka, Kan. (1909)

JONES, JOHN G., 13 Astor Place, New York City (1915)

JONES, MILTON F., 71 Kilby St., Boston, Mass. (1912)

JORDAN, RALPH W., Lockwood, Ohio (1916)

Joslin, Falcon, 727 17th Ave., N., Seattle, Wash. (1911)

JUDSON, FREDERICK NEWTON, 3733 Washington Ave., St. Louis, Mo. (1900)

KAHN, OTTO H., 52 William St., New York City, (1916)

Kaiser, Clarence Heer, 34 East 45th St., New York City (1915)

+KALAMAZOO COLLEGE LIBRARY, Kalamazoo, Mich.

Kammeyen, J. E., Kansas State Agricultural College, Manhattan, Kan. (1913)

KANE, JOHN HENRY, Union Natl. Bank Bldg., Bartlesville, Okla. (1916)

KANSAS CITY PUBLIC LIBRARY, Kansas City, Mo.

KANSAS STATE MANUAL TRAINING NORMAL SCHOOL, Pittsburg, Kan.

+KANSAS STATE NORMAL SCHOOL, Emporia, Kan.

†KANSAS, UNIVERSITY OF, LIBRARY, Lawrence, Kan.

KAREL, L. ALBERT, Kewaunee, Wis. (1915)

KEAYS, ELDRED M., 330 West 95th St., New York City (1911)

Keeley, Edward S., 1321 Railway Exchange, Chicago, Ill. (1912)

KEHEW, Mrs. MARY MORTON, 29a Chestnut St., Boston, Mass. (1911)

Keirstead, Wilfred C., University of New Brunswick, Fredericton, N. B. Can. (1911)

KEITH, HORACE A., 1090 Main St., Brockton, Mass. (1909)

Keith, John Meigs, San José, Costa Rica, Central America (1896)

Kellogo, John Harvey, Battle Creek Sanitarium, Battle Creek, Mich. (1911)

Kellor, Frances A., 20 West 34th St., New York City (1915)

Kelly, John F., 284 W. Housatonic St., Pittsfield, Mass. (1887)

Kelsey, Carl, Logan Hall, University of Pennsylvania, Philadelphia, Pa. (1909)

\*Kelsey, Francis Willey, 826 Tappan St. Ann Arbor, Mich. (1887)

KEMMERER, EDWIN WALTER, Fitz Randolph Road, Princeton, N. J. (1903)

KENNAN, KOSSUTH KENT, 935 Cambridge Ave., Milwaukee, Wis. (1900)

Kennedy, Frank G., Jr., 2043 Spruce St., Philadelphia, Pa. (1916) Kennedy, Frank Lowell, 43 Appleton St., Cambridge, Mass. (1909)

Kennedy, J. A. C., 620 South 38th St., Omaha, Nebr. (1914)

Kennedy, James Boyd, Presbyterian College, Clinton, S. C. (1906)

Kennedy, Philip B., Equitable Bldg., Melbourne, Australia (1909)

Kent, William, House of Representatives, Washington, D. C. (1912)

†Kenyon College Library, Gambier, Ohio

KEPPELMANN, E. P., 5871 Beacon St., Pittsburgh, Pa. (1914)

KERN, CHARLES EVERETT, 1328 Harvard St., Washington, D. C. (1911)

KERR, FRANK EWER, 51 Grace Church Place, Port Richmond, N. Y. (1915)

Kerr, William D., 19 S. La Salle St., Chicago, Ill. (1913)

Kesler, Harold A., Spitzer Bldg., Toledo, Ohio (1915)

Kespohl, Julius, Quincy, Ill. (1911)

\*Keynes, John Neville, 6 Harvey Road, Cambridge, Eng. (1888)

KEYSER, ROBERT BRENT, 5 Hopkins Place, Baltimore, Md. (1903)

Kibler, Thomas L., 1692 31st St., N. W., Washington, D. C. (1911)

Kidd, Howard C., University of Pittsburgh, Pittsburgh, Pa. (1916)

KIDDER, CAMILLUS G., 27 William St., New York City (1887)

Kieckhoefer, Marie, Acolian Bldg., 33 West 42d St., New York City (1915) Kiekhoefer, William H., 27 South Hall, University of Wisconsin, Madison,

Kies, William S., Scarboro-on-Hudson, N. Y. (1915)

Kimball, David P., Box 2133, Boston, Mass. (1909)

KIME, VIRGIL M., 700 Main St., Hartford, Conn. (1908)

KING, B. WALTER, 390 N. Willey St., Morgantown, W. Va. (1914)

King, Clifford Lucas, 1420 Hewitt Ave., Everett, Wash. (1912)

King, James L., State Library, Topeka, Kan. (1912)

King, Lyndon M., Northrup, King & Co., Minneapolis, Minn. (1910)

KING, WILLFORD I., 218 N. Mills St., Madison, Wis. (1911)

KING, W. L. MACKENZIE, The Roxborough, Ottawa, Ont., Can. (1914)

Kingsbury, Susan Myra, Low Buildings, Bryn Mawr, Pa. (1910)

Kinley, David, University of Illinois, Champaign, Ill. (1890)

KINMONTH, J. LYLE, 704 Fifth Ave., Asbury Park, N. J. (1913)

\*Kinosita, Yetaro, 38 Minemicho, Takanawa, Shiba-Ku, Tokyo, Japan (1904)

\*Kinsey, Oliver P., Valparaiso, Ind. (1911)

KIRBY, DANIEL N., 918 Security Bldg., St. Louis, Mo. (1914)

KIRK, WILLIAM, University of Rochester, N. Y. (1903)

KIRKBRIDE, FRANKLIN B., 375 Park Ave., New York City (1911)

KIRSTEIN, LOUIS E., 416 Washington St., Boston, Mass. (1909)

KITABAWA, SHINJIRO, 402 Nishi Okubo, Tokyo Tu, Japan (1914)

+KITSELMAN, HARRY L., 825 E. Washington St., Muncie, Ind.

KIYOWARA, DANZO, 1134 Georgia St., Los Angeles, Calif. (1912)

KLAR, FRANK, Cotobato, Cotobato, P. I. (1911)

KLEENE, GUSTAV A., Trinity College, Hartford, Conn. (1898)

KLEIN, JOSEPH J., 547 West 142d St., New York City (1909)

KLEIN, JULIUS, 35 Lee St., Cambridge, Mass. (1914)

KNAPP, BRADFORD, 1215 Crittenden St., N. W., Washington, D. C. (1915)

KNAPP, MARTIN AUGUSTINE, Southern Bldg., Washington, D. C. (1901)

KNAUF, WILLIAM N., Chilton, Wis. (1914)

KNAUTH, OSWALD WHITMAN, Princeton, N. J. (1911)

KNIGHT, FRANK H., 105 DeWitt Place, Ithaca, N. Y. (1915)

KNOTT, STUART, 16 Ave. Emile Deschanel, Paris, France (1912)

+KOBE HIGHER COMMERCIAL SCHOOL, Kobe, Japan

KOCHENDERFER, C. C., Ithaca, N. Y. (1915)

KOHLER, MAX J., 52 William St., New York City (1902)

KOHN, ARTHUR, 218 City Hall, Cleveland, Ohio (1914)

Koizumi, S., Uwozaki, Nade, near Kobe, Japan

†KOJYOKWA, MESSES., The Commercial and Industrial Bureau, Department of Agriculture and Commerce, Tokyo, Japan

KOPS, DANIEL, 16th St. and Irving Place, New York City (1916)

KOREN, JOHN, 25 Pemberton Square, Boston, Mass. (1909)

KOSTER, FREDERICK J., 22d and Illinois Sts., San Francisco, Calif. (1912)

KOTANY, LUDWIG, 307 North 4th St., St. Louis, Mo. (1909)

KRAUSE, HOLGER E., The Prudential Insurance Co., Newark, N. J. (1909)

KREBS, WILLIAM S., 427 N. Grove Ave., Oak Park, Ill. (1915)

Krishna, M. B., Gurukula College, Hardwar, India (1913)

KRUTTSCHNITT, J., 165 Broadway, New York City (1910)

Kuczynski, Robert K., 47 Sponholzstrasse, Schoensberg, Berlin, Germany (1900)

-Kuga, Teizaburo, C/o Mitsubishi Branch Office, Kozone-Machi, Nagasaki, Japan

KURSHEEDT, MANUEL AUGUSTUS, 302 Broadway, New York City (1890)

KUTZLEB, WALTER, 840 West End Ave., New York City (1908)

KYOTO IMPERIAL UNIVERSITY, The College of Law, Kyoto, Japan

+LAFAYETTE COLLEGE, LIBRARY OF, Easton, Pa.

LAGERQUIST, WALTER E., 1716 Orrington Ave., Evanston, Ill. (1910)

LAHEE, J. S., Burlington, Iowa (1910)

LAIDLER, HARRY WELLINGTON, 70 Fifth Ave., New York City (1916)

LAL, MANOHAR, Bar-at-Law, Lahore, India (1911)

LANCASTER, F. W., Title Insurance Bldg., Los Angeles, Calif. (1915)

LANE, THEODORE E., 25 Franklin Place, Flushing, L. I., N. Y. (1916)

LANGMUIR, DEAN, 14 Wall St., New York City (1913)

LANGSHAW, WALTER H., 152 Cottage St., New Bedford, Mass. (1913)

LANIER, JOHN F., 5803 Cates Ave., St. Louis, Mo. (1913)

LAPPIN, RICHARD C., Bureau of the Census, Washington, D. C. (1915)

LARRABEE, HILDA LEAVENWORTH, Tower Court, Wellesley, Mass. (1916)

LAU, WAI MAN, Furnald Hall, Columbia University, New York City (1916)

LAUGHLIN, J. LAURENCE, East Jaffrey, N. H. (1904)

LAUMAN, GEORGE NIEMAN, Cornell University, Ithaca, N. Y. (1909)

LAUTERBACH, EDWARD, 22 William St., New York City (1900)

LAVINE, ABRAHAM L., 352 West 117th St., New York City (1912)

LAWALL, WILLIAM POWELL, Hazleton, Pa. (1912)

LAWRENCE COLLEGE LIBRARY, Appleton, Wis.

LAWRENCE, JOHN SILSBEE, 89 Franklin St., Boston, Mass. (1912)

LAWSON, VICTOR F., 123 Fifth Ave., Chicago, Ill. (1910)

LEACOCK, STEPHEN BUTLER, McGill University, Montreal, Que., Can. (1912)

Lee, Ivy Ledbetter, 26 Broadway, New York City (1904)

LEE, JOSEPH E., Jacksonville, Fla. (1911)

LEE, WILSON HORATIO, Orange, Conn. (1913)

- LEEDS, RUDOLPH G., Richmond, Ind. (1916)
- \*Leeson, J. R., Box 2221, Boston, Mass. (1890)
- Lefavour, Henry, 3 Brimmer St., Boston, Mass. (1911)
- †Legislative Library, Parliament Bldg., Regina, Sask., Can.
- +LEGISLATIVE REFERENCE BUREAU, Columbus, Ohio
- †Legislative Reference Bureau, Station A., Lincoln, Nebr.
- +Legislative Reference Bureau, Montpelier, Vt.
- †LEGISLATIVE REFERENCE BUREAU, Springfield, Ill.
- LEISERSON, WILLIAM M., Toledo University, Toledo, Ohio (1915)
- LELAND, HENRY M., 2230 Dime Bank Bldg., Detroit, Mich. (1911)
- +LELAND STANFORD JUNIOR UNIVERSITY LIBRARY, Stanford University, Calif.
- LEONARD, A. W., 860 Stuart Bldg., Seattle, Wash. (1911)
- Leonard, Eugene O., Box 548, Pocatello, Idaho (1915)
- LEONARD, JOY LUTHER, 316 S. Washington St., Crawfordsville, Ind. (1911)
- LE ROSSIGNOL, JAMES EDWARD, Station A., Lincoln, Nebr. (1896)
- LEROY-BEAULIEU, PAUL, Collège de France, Paris, France (1887)
- Lesconier, Don D., 1440 Capitol Ave., St. Paul, Minn. (1913)
- Lesher, Robert Allen, 2940 Broadway, New York City (1915)
- LESTER, HUGH, First Natl. Bank Bldg., Birmingham, Ala. (1916)
- Leverett, George V., 66 Beacon St., Boston, Mass. (1911)
- Levy, Raphael-Georges, 3 Rue de Noisiel XVIe, Paris, France (1893)
- Lewinski-Corwin, Edward H., 17 West 43d St., New York City (1909)
- Lewis, Howard T., University of Idaho, Moscow, Idaho (1914)
- Lewisonn, Sam A., 61 Broadway, New York City (1912)
- +L'Expedition de Gazettes du Bureau de Poste, Petrograd, Russia +Librarie N. Liedert, Sepoffski Tinie 10, Moscow, Russia
- †LIBRARY OF CONGRESS, Order Division, Washington, D. C.
- †LIBRARY OF PARLIAMENT, Ottawa, Ont., Can.
- †LIBRARY, THE, INLAND REVENUE, Room 44, New Wing, Somerset House, Strand, London, W. C., Eng.
- +LIBRARY, Room 1001, P. S. Bldg., Broad and Bank Sts., Newark, N. J.
- Lieb, J. W., 124 East 15th St., New York City (1911)
- Liebes, Leon, 167 Post St., San Francisco, Calif. (1912)
- LIEBMANN, CHARLES J., 36 Forrest St., Brooklyn, N. Y. (1911)
- †LINCOLN CITY LIBRARY, Lincoln, Nebr.
- LINCOLN, EDMUND EARL, 10 Avon St., Cambridge, Mass. (1913)
- †LINDENWOOD COLLEGE FOR WOMEN, St. Charles, Mo.
- \*Lindsay, Samuel McCune, 611 Kent Hall, Columbia University, New York City (1894)
- LINES, GEORGE, 685 Franklin Place, Milwaukee, Wis. (1914)
- +Ling, Li Sum, Peking Daily News, Peking, China
- LIPMAN, F. L., Wells Fargo Nevada National Bank, San Francisco, Calif. (1894)
- LIPPINCOTT, HAROLD E., 35 Nassau St., New York City (1898)
- LIPPINCOTT, ISAAC, Washington University, St. Louis, Mo. (1910)
- LITMAN, SIMON, University of Illinois, Urbana, Ill. (1909)
- LITTLE, ESTHER LOUISE, 107 York Road, Towarda, Pa. (1914)
- LIVINGSTON, ROBERT E., 1 Madison Ave., New York City (1914)
- LLOYD, GODFREY I. H., 46 Ullet Road, Liverpool, Eng. (1910)
- LLOYD, JOHN E., 29th St. and Ridge Ave., Philadelphia, Pa. (1916)

LLOYD, O. G., Ames, Iowa (1911)

LOCKE, GEORGE H., The Public Library, Toronto, Ont., Can. (1911)

LOCKHART, OLIVER CARY, Ohio State University, Columbus, Ohio (1904)

LOCKHART, S. B., Richmond, Utah (1915)

LOEB, ISIDOR, University of Missouri, Columbia, Mo. (1892)

LOESCHER & Co., via Due Macelli, 88, Rome, Italy

LOEWY, BENNO, 206 Broadway, New York City (1890)

LOGAN, JAMES, 222 Salisbury St., Worcester, Mass. (1900)

LOMBARDI, C., Dallas, Texas (1911)

LONG BEACH PUBLIC LIBRARY, Long Beach, Calif.

LONG, GEORGE M., Cudahy, Wis. (1912)

LONGLEY, EDMUND W., 125 Milk St., Boston, Mass. (1909)

LOOMIS, ROBERT H., 102 Lake View Ave., Cambridge, Mass. (1915)

LOOS, ISAAC ALTHAUS, State University of Iowa, Iowa City, Iowa (1890)

LORD, JAMES F., 281 St. Paul St., Brookline, Mass. (1913)

LORENZ, MAX OTTO, 4000 47th St., N. W., Washington, D. C. (1904)

LORING, AUGUSTUS PEABODY, 40 State St., Boston, Mass. (1909)

+Los Angeles Public Library, Los Angeles, Calif.

\*Louchheim, Samuel K., West End Trust Bldg., Cor. Broad St. and S. Penn Sonare, Philadelphia, Pa. (1896)

LOUGH, WILLIAM H., JR., Pondfield Court, Bronxville, N. Y. (1907)

LOUISVILLE FREE PUBLIC LIBRARY, Louisville, Ky.

LOVEJOY, FRANK WILLIAM, Eastman Kodak Co., Rochester, N. Y. (1914)

LOVEJOY, OWEN R., 105 East 22d St., New York City (1910)

\*Low, Seth, 30 East 64th St., New York City (1887)

LOWDEN, FRANK O., Oregon, Ill. (1901)

Lowe, Ellsworth Boutelle, 42 Baldwin St., Rochester, N. Y. (1911)

LOWENTHAL, ESTHER, 10 West St., Northampton, Mass. (1909)

LOWRY, JOHN C., 126 South 19th St., Philadelphia, Pa. (1889)

LUBARSKY, LOUIS H., 522 West 112th St., New York City (1914)

LUBIN, LOUIS, 80 Wall St., New York City (1910)

Luce, Robert, 8 Bosworth St., Boston, Mass. (1910)

LUM, CHARLES M., Prudential Bldg., Newark, N. J. (1910)

LUNGER, J. B., 165 Broadway, New York City (1912)

LUPTON, Mrs. FRANK M., 839 St. Mark's Ave., Brooklyn, N. Y. (1911)

LUTZ, CHARLES A., National City Bank, 55 Wall St., New York City (1911)

LUTZ, HARLEY LEIST, 213 W. Lorain St., Oberlin, Ohio (1909)

Lyall, William L., Brighton Mills, Passaic, N. J. (1911)

LYMAN, HERBERT, 26 Marlboro St., Boston, Mass. (1909)

Lyon, Hastings, 141 Broadway, New York City (1912)

+MACALESTER COLLEGE LIBRARY, St. Paul, Minn.

McBurney, Benjamin Thomas, 225 East 4th St., Cincinnati, Ohio (1914)

McCabe, David Aloysius, 25 Patton Hall, Princeton, N. J. (1909)

McCarty, Harry C., Federal Trade Commission, Washington, D. C. (1915)

MACCLEAN, E. A., Room 2401, 16 Dey St., New York City (1910)

McClellan, George B., Princeton University, Princeton, N. J. (1913)

McClellan, William, 141 Broadway, New York City (1915)

McClung, R. L., 118 Triphammer Road, Ithaca, N. Y. (1915)

McConnell, Francis J., 969 Logan St., Denver, Colo. (1909)

McConnell, H. F., 8 Fairfield St., Montclair, N. J. (1911)

McCormick, Ruth (Mrs. Medill), 500 Diversey Parkway, Chicago, Ill. (1911) McCrea, Roswell Cheney, Columbia University, New York City (1899) McCulloch, John Austen, Juniper and 2d Sts., McKeesport, Pa. (1912) McCulloch, Richard, 3869 Park Ave., St. Louis, Mo. (1915) McCutchen, George, 1906 Pendleton St., Columbia, S. C. (1910) McDonald, Jesse, Third Natl. Bank Bldg., St. Louis, Mo. (1911) McDonough, Charles A., 18 Tremont St., Boston, Mass. (1914) \*MacDuffie, John, 182 Central St., Springfield, Mass. (1893) McElheny, Victor K., Jr., 204 Franklin St., New York City (1916) McElvare, Rowland Robbins, 231 Decatur St., Brooklyn, N. Y. (1914) McElwain, J. Franklin, 348 Congress St., Boston, Mass. (1909) +McEnerney, Garret W., 2002 Hobart Bldg., San Francisco, Calif. McFall, Robert J., University of Minnesota, Minneapolis, Minn. (1916) Macfarland, Charles S., 105 East 22d St., New York City (1912) Macfablane, Charles William, 524 Walnut St., Philadelphia, Pa. (1894) Macfarlane, John J., Philadelphia Museums, Philadelphia, Pa. (1888) MACGIBBON, DUNCAN ALEXANDER, Brandon College, Brandon, Man., Can. (1911)

+McGill University, Library of, Montreal, Que., Can. McGregor, Tracy W., 239 Brush St., Detroit, Mich. (1912) McGuire, Benjamin Roger, 1312 Park Place, Brooklyn, N. Y. (1913) MACINTYRE, ARCHIBALD D., 202-B, S. Richards St., Joilet, Ill. (1914) MacIver, Robert Morrison, University of Toronto, Toronto, Ont., Can. (1915) McKenna, James A., 1 Liberty St., New York City (1910) McKenzie, Fayette A., Fisk University, Nashville, Tenn. (1908) MACKENZIE, WILLIAM, 22 Meadowside, Dundee, Scotland (1915) Mckibben, James A., 42 Mellen St., Dorchester Centre, Boston, Mass. (1909) McKinlock, George A., 320 S. Fifth Ave., Chicago, Ill. (1911) McKinney, Henry Nelson, 600 West End Ave., New York City (1916) McKitrick Reuben, 414 West 24th St., Cedar Falls, Iowa (1913) McLaren, W. W., Williams College, Williamstown, Mass. (1911) McLaughlin, J. A., Box 52, San Antonio, Texas (1913) McLaughlin, John C., 14th and C. Sts., N. W., Washington, D. C. (1916) McLean, Francis Herbert, 130 East 22d St., New York City (1898) MacLean, James Alexander, University of Manitoba, Winnipeg, Man., Can. (1894)

McLean, Simon James, R. R. Commission, Ottawa, Ont., Can. (1900)
McMahon, Theresa S., 4026 10th Ave., N. E., Seattle, Wash. (1913)
McMillen, George Burr, 606 E. Springfield Ave., Champaign, Ill. (1915)
McMurtrie, Uz, Marion, Ind. (1912)
McMunn, Robert N., 498 Terrace Ave., Milwaukee, Wis. (1910)

McNaughton, M. W. A., 271 Prince Arthur St., S. W., Montreal, Que., Can. (1914)

MACOMBER, A. E., Nicholas Bldg., Toledo, Ohio (1886)

McPherson, Logan Grant, The Players Club, 16 Gramercy Park, New York City (1899)

MacRea, Farquhar J., 68 William St., New York City (1912)

MacVeagh, Franklin, Washington, D. C. (1900)

\*MacVeagh, Wayne, Brookfield Farm, Bryn Mawr, Pa. (1887)

McVer, Frank LeRond, University of North Dakota, University, N. D. (1895)

McVITTY, ALBERT E., Bryn Mawr, Pa. (1915)

MACY, V. EVERIT, 68 Broad St., New York City (1899)

MADDOCK, WILLIAM HERBERT, 163 W. Pender St., Vancouver, B. C., Can. (1910)

Madero, Ernesto, 115 Broadway, New York City (1915)

MAGEE, JAMES DYSART, University of Cincinnati, Cincinnati, Ohio (1911)

Magruder, James William, 2528 N. Calvert St., Baltimore, Md. (1915)

+MAINE, UNIVERSITY OF, LIBRARY, Orono, Me.

MALONE, WILLIAM H., 318 First National Bank Bldg., Denver, Colo., (1913)

Maltbie, Milo Roy, 593 Riverside Drive, New York City (1898)

+MANCHESTER CITY LIBRARY, Manchester, N. H.

Mangold, George Benjamin, 4002 Lexington Ave., St. Louis, Mo. (1910)

+MANITOBA, UNIVERSITY OF, Winnipeg, Man., Can.

MANLY, BASIL MAXWELL, U. S. Commission on Industrial Relations, Washington, D. C. (1910)

MANN, CHARLES F., East Bridgewater, Mass. (1911)

MANTERO, CARLOS BELARET, 610 West 116th St., New York City (1916)

\*Marburg, Theodore, 14 W. Mt. Vernon Place, Baltimore, Md. (1890)

+MARIETTA COLLEGE LIBRARY, Marietta, Ohio

MARK, MARY LOUISE, 270 S. State St., Westerville, Ohio (1912)

MARKHAM, C. H., 135 Park Row, Chicago, Ill. (1911)

MARKHAM, GEORGE DICKSON, 4961 Berlin Ave., St. Louis, Mo. (1910)

MARKLE, JOHN, Jeddo, Pa. (1912)

MARKOE, MATILDA C. (Mrs. John), 1630 Locust St., Philadelphia, Pa. (1912)

Marks, Marcus M., 4 East 94th St., New York City (1904)

Marquis, J. Clyde, 220 Greenwood Ave., Jenkintown, Pa. (1911)

MARR, C. J., 54 William St., New York City (1910)

MARRONE, JOSEPH M., Utica, N. Y. (1915)

Marsh, R. K., Sugar Bldg., Denver, Colo. (1912)

MARSHALL, ALFRED, Cambridge, Eng. (1887)

MARSHALL, LEON CARROLL, University of Chicago, Chicago, Ill. (1904)

†MARSHALLTOWN PUBLIC LIBRARY, Marshalltown, Iowa

MARSTON, EDWIN SPRAGUE, Box 72, Florham Park, N. J. (1911)

MARTIN, EARLE E., 32 Northfield Ave., Cleveland, Ohio (1911)

MARTIN, JOHN, Grymes Hill, S. I., N. Y. (1905)

MARTIN, OSCAR Ross, University of Nebraska, Lincoln, Nebr. (1910)

MARTIN, R. W., 28 Nassau St., New York City (1905)

MARTIN, SELDEN OSGOOD, 11 Beech St., Garden City, L. I., N. Y. (1904)

MARTIN, WILLIAM McCHESNEY, Federal Reserve Bank, St. Louis, Mo. (1910)

MARTINDALE, JAMES B., The Chemical National Bank, New York City (1916)

Marvin, Cornelia, Oregon Library Commission, State House, Salem, Ore. (1908)

MARWICK, JAMES, 79 Wall St., New York City (1910)

Mason, Augustus Lynch, 1006 N. Delaware St., Indianapolis, Ind. (1904)

Mason, Janvis Woolverton, 100 Broadway, New York City (1910)

+Massachusetts Institute of Technology, Boston, Mass.

+Massachusetts State Library, State House, Boston, Mass.

MATTHEWS, ALBERT, Hotel Oxford, Boston, Mass. (1914)

- †Maverick, Lewis, American Express Co., Copenhagen, Denmark
  - MAY, GEORGE O., 52 William St., New York City (1908)
- MAYER, LEVY, Moran, Kraus & Mayer, Chicago, Ill. (1900)
- Mead, George H., 1537 East 60th St., Chicago, Ill. (1910)
- +Mechanics Mercantile Library, 31 Post St., San Francisco, Calif.
- +MEDFORD PUBLIC LIBRARY, Medford, Mass.
- MEE, JOHN HUBERT, Merchants Exchange Bldg., San Francisco, Calif. (1913)
- MEEKER, ROYAL, Bureau of Labor Statistics, Washington, D. C. (1903)
- Mehely, Coloman, Fö utca 19, Budapest, Hungary II (1909)
- +Melville & Mullen, Overland Freight Transfer Co., 217 Front St., San Francisco, Calif.
- +MERCANTILE LIBRARY, Astor Place, New York City
- +MERCANTILE LIBRARY, Broadway and Locust St., St. Louis, Mo.
- MERCHANT, ELY OTHMAN, Bureau of Corporations, Washington, D. C. (1910)
- MEREDITH, E. T., 600 Park Lane, Des Moines, Iowa (1915)
- Meriam, Richard Stockton, Greenwood, Mass. (1913)
- MERIWETHER, HUNTER M., St. Regis Hotel, Kansas City, Mo. (1912)
- Merriam, Alexander Ross, 314 Collins St., Hartford, Conn. (1893)
- Merriam, James R., The World's Work, 11 West 32d St., New York City (1914)
- MERRITT, ELLA A., 1437 Park Road, Washington, D. C. (1915)
- MERRITT, THOMAS POLK, Reading, Pa. (1911)
- METCALF, HENRY CLAYTON, Tufts College, Mass. (1900)
- METCALF, MAYNARD M., 128 Forest St., Oberlin, Ohio (1910)
- +METROPOLITAN LIFE INSURANCE Co., LIBRARY OF, 1 Madison Ave., New York City
- MEYER, BALTHASAR HENRY, Interstate Commerce Commission, Washington, D. C. (1889)
- MEYER, EUGENE, JR., 14 Wall St., New York City (1909)
- +MICHIGAN AGRICULTURAL COLLEGE LIBRARY, East Lansing, Mich.
- +MICHIGAN STATE LIBRARY, Lansing, Mich.
- +MICHIGAN, UNIVERSITY OF, LIBRARY, Ann Arbor, Mich.
- +MIDDLEBURY COLLEGE LIBRARY, Middlebury, Vt.
- MIKAMI, YOSHINAGA, Box 461, Manila, P. I. (1901)
- MIKKELSEN, MICHAEL ANDREW, R. F. D., Georgetown, Conn. (1900)
- MILLER, ABOLPH CASPAR, 2320 S. St., N. W., Washington, D. C. (1901)
- MILLER, D., 1550 N. State St., Chicago, Ill. (1910)
- MILLER, EDITH MARY, Industrial Commission of Ohio, Columbus, Ohio (1916)
- MILLER, EDMUND THORNTON, University Station, Austin, Texas (1909)
- MILLER, Mrs. ELIZABETH C. T., 3738 Euclid Ave., Cleveland, Ohio (1914)
- MILLER, GEORGE P., 102 Wisconsin St., Milwaukee, Wis. (1907)
- MILLER, STEPHEN IVAN, Stanford University, Calif. (1914)
- MILLER, WILLIAM B., 400 Park Ave., New York City (1913)
- MILLIKEN, CARL E., Island Falls, Me. (1914)
- MILLIKEN, WALTER L., 1470 N. Penn St., Indianapolis, Ind. (1913)
- MILLION, JOHN WILSON, Hardin College, Mexico, Mo. (1901)
- MILLIS, HARRY ALVIN, The University of Chicago, Chicago, Ill. (1895)
- MILLS, HERBERT ELMER, Poughkeepsie, N. Y. (1890)
- +MILWAUKEE PUBLIC LIBRARY, Milwaukee, Wis.

- MINER, EDWARD G., The Pfaudler Co., Rochester, N. Y. (1914)
- MINER, W. E., 30 Broad St., New York City (1911)
- +MINISTERO AGRICOLTURA, INDUSTRIA AND COMMERCE, Biblioteca, Rome, Italy
- +MINNEAPOLIS PUBLIC LIBRARY, Minneapolis, Minn.
- +MINNESOTA TAX COMMISSION, State Capitol, St. Paul, Minn.
- MINNESOTA, UNIVERSITY OF, LIBRARY, Minneapolis, Minn.
- +MINNESOTA, UNIVERSITY OF, Department of Agriculture, University Farm, St. Paul, Minn.
- +MISSOURI LIBRARY COMMISSION, Legislative Reference Dept., Jefferson City, Mo.
- +MISSOURI, UNIVERSITY OF, LIBRARY, Columbia, Mo.
- MITCHELL, JAMES McC., 70 Oakland Place, Buffalo, N. Y. (1914)
- MITCHELL, J. SHERMAN, 966 Park Place, Brooklyn, N. Y. (1910)
- MITCHELL, THOMAS WARNER, University of Minnesota, Minneapolis, Minn. (1912)
- MITCHELL, WALTER S., 5028 Morewood Place, East End, Pittsburgh, Pa. (1912)
- \*MITCHELL, WESLEY CLAIR, 15 N. Washington Square, New York City (1903)
- MIXTER, CHARLES WHITNEY, 77 Grove St., New Haven, Conn. (1890)
- MOFFAT, JAMES ERNEST, 5749 Drexel Ave., Chicago, Ill. (1915)
- MOFFETT, Paul, 300 N. Market St., Canton, Ohio (1914)
- Mohr, Louis, 349 W. Illinois St., Chicago, Ill. (1910)
- Monroe, Arthur Eli, 27 Conant Hall, Cambridge, Mass. (1915)
- MONTANA AGRICULTURAL COLLEGE, Bozeman, Mont.
- +MONTANA HISTORICAL AND MISCELLANEOUS LIBRARY, Helena, Mont.
- MONTGOMERY, ROBERT H., 525 West End Ave., New York City (1915)
- Moody, Frederick C., Bell Telephone Co. of Pa., Philadelphia, Pa. (1912)
- Moore, Henry Ludwell, Columbia University, New York City (1896)
- Moore, Isaiah D., The City Hall, New Orleans, La. (1916)
- MOORE, ROBERT, 61 Vandeventer Place, St. Louis, Mo. (1894)
- MOORE, WILLIAM V., 610 Wayne Co. Savings Bank Bldg., Detroit, Mich. (1910)
- Moors, John F., 111 Devonshire St., Boston, Mass. (1909)
- MOOT, ADELBERT, 45 Erie Co. Savings Bank Bldg., Buffalo, N. Y. (1910)
- MORAWETZ, VICTOR, 44 Wall St., New York City (1915)
- Morehouse, Samuel C., 42 Church St., New Haven, Conn. (1909)
- MORGAN, JOHN ALLEN, Middlebury, Vt. (1909)
- MORGAN, JOHN PIERPONT, 23 Wall St., New York City (1913)
- MORGENTHAU, HENRY, 30 East 42d St., New York City (1911)
- Morgenthau, M. L., 431 Hudson St., New York City (1909)
- MORMAN, JAMES B., Kensington, Md. (1906)
- Morris, Edward B., Travelers Insurance Company, Hartford, Conn. (1915)
- Morris, Ray, 14 Wall St., New York City (1909)
- Morrison, A. F., Crocker Bldg., San Francisco, Calif. (1911)
- Morrison, F. W., Linwood, Mass. (1912)
- Morse, Arthur A., 508 Flour Exchange Bldg., Minneapolis, Minn. (1909)
- Morse, Frank L., Ithaca, N. Y. (1910)
- Morss, Charles A., 201 Devonshire St., Boston, Mass. (1911)
- Morss, John Wells, 60 State St., Boston, Mass. (1909)
- MORTLAND, INEZ, Louisiana State University Library, Baton Rouge, La. (1909)

- Morton, Alfred Balch, 509 Title Bldg., Baltimore, Md. (1911)
- Mosle, George R., 16 Exchange Place, New York City (1911)
- Motley, James Marvin, 1308 Eutaw Place, Baltimore, Md. (1910)
- Morr, Howard S., 16 Wall St., New York City (1910)
- MOULTON, HAROLD G., University of Chicago, Chicago, Ill. (1911)
- †MOUNT HOLYOKE COLLEGE LIBRARY, South Hadley, Mass.
- Mourassé, Harouo, 24 Harukimatchi, Santchomé, Hongo, Tokyo, Japan (1901)
- MOWBRAY, ALBERT HENRY, 185 Devonshire St., Boston, Mass. (1912)
- MOYER, MELBOURNE S., 60 Wall St., New York City (1910)
- MOYNAHAN, GEORGE S., 50 Oliver St., Boston, Mass. (1904)
- †Muglia, Vincenzo, Via Etnea N., 134, Catania, Italy
- Muhse, Albert Charles, British-American Tobacco Co., 200 Fifth Ave., New York City (1903)
- MULLER, JEAN PAUL, 423 Woodward Bldg., Washington, D. C. (1912)
- MUMFORD, EBEN, 408 Genesee St., Lansing, Mich. (1913)
- Munn, John P., 18 West 58th St., New York City (1911)
- MURDOCH, ARTHUR EDWARD, Wichita Falls, Texas (1911)
- MURDOCK, LOUISE HAMILTON, Holden, Mass. (1910)
- MURKLAND, SIDNEY WALLACE, 12 Fifth Ave., New York City (1915)
- MURRAY, NATHANIEL C., Department of Agriculture, Washington, D. C. (1913)
- Mussey, Henry Raymond, Columbia University, New York City (1902)
- Myers, E. A., Box 933, Toledo, Ohio (1915)
- NAGEL, CHARLES, Security Bldg., St. Louis, Mo. (1901)
- Nakagawa, S., Furukawa Mining Co., Tokyo, Japan (1907)
- NASH, LUTHER ROBERTS, 147 Milk St., Boston, Mass. (1916)
- NASON, FRANK L. H., 372 Congress St., Boston, Mass. (1914)
- NAU, CARL H., 1102 American Trust Bldg., Cleveland, Ohio (1910)
- NEARING, Scott, University of Toledo, Toledo, Ohio (1908)
- +Nebraska, State Library of, Lincoln, Nebr.
- †Nebraska, University of, Library, Lincoln, Nebr.
- NEEB, CHARLES W., Box 127, Pittsburgh, Pa. (1886)
- NEGLEY, RICHARD VAN WYCK, 120 W. Cypress St., San Antonio, Texas (1914)
- NEIL, M. M., Trenton, Tenn. (1915)
- Nelli, Charles P., 616 Woodward Bldg., Washington, D. C. (1896)
- NETTLETON, CHARLES H., Drawer L., Derby, Conn. (1911)
- +Neustädter, Herrn., Vossstr. 11, Berlin, W., 9, Germany
- +Newark Public Library, Newark, N. J.
- +New Bedford Public Library, New Bedford, Mass.
- +Newberry Library, Walton Place, Chicago, Ill.
- NEWBOLD, ARTHUR E., Chestnut and 5th Sts., Philadelphia, Pa. (1912)
- Newburger, David M., 302 Broadway, New York City (1911)
- NEWCOMB, HARRY TURNER, R. F. D. No. 1, Bethesda, Md. (1889)
- Newcomer, Mabel, 416 West 122d St., New York City (1915)
- +New Hampshire College of Agriculture and Mechanic Arts, Durham, New Hampshire
- +New Hampshire State Library, Concord, N. H.
- +New Jersey State Library, Trenton, N. J.
- Newlove, George H., 708 South 6th St., Champaign, Ill. (1914)
- +New ORLEANS PUBLIC LIBRARY, New Orleans, La.

- +NEWTON FREE LIBRARY, Newton, Mass.
- +NEW YORK PUBLIC LIBRARY, 476 Fifth Ave., New York City
- +NEW YORK STATE LIBRARY, Albany, N. Y.
- NEW YORK TELEPHONE COMPANY, 15 Dey St., New York City
- NEW YORK TELEPHONE COMPANY, R. V. Marye, Gen'l Atty., 15 Dey St., New York City
- +NEW YORK UNIVERSITY LIBRARY, University Heights, New York City
- †New York University School of Commerce, Accounts and Finance, Washington Square E., New York City
- NICHOLSON, DONALD A., 2800 St. Charles Ave., New Orleans, La. (1916)
- NICKELSBURG, M. S., 559 Mission St., San Francisco, Calif. (1916)
- NICKERSON, JOHN, JR., 61 Broadway, New York City (1910)
- NIMMO, HARRY M., Detroit Saturday Night, Detroit, Mich. (1912)
- +NORMAL SCHOOL LIBBARY, Indiana, Pa.
- NORMAL SCHOOL LIBRARY, Kirksville, Mo.
- +NORTH CAROLINA, UNIVERSITY OF, LIBRARY, Chapel Hill, N. C.
- +NORTH DAKOTA AGRICULTURAL COLLEGE, LIBRARY OF, Agricultural College, N. D.
- NORTH DAKOTA PUBLIC LIBRARY COMMISSION, BISMARCK, N. Dak.
- +NORTH DAKOTA TAX COMMISSION, Bismarck, N. Dak.
- +NORTH DAKOTA, UNIVERSITY OF, LIBRARY, University, N. Dak.
- +NORTHWESTERN STATE NORMAL SCHOOL, Alva, Okla.
- +Northwestern University Library, Evanston, Ill.
- NORTHWESTERN UNIVERSITY SCHOOL OF COMMERCE, 31 W. Lake St., Chicago, Ill.
- NORTON, FRED LEWIS, 434 Tremont Bldg., Boston, Mass. (1887)
- NORTON, WILLIAM JOHN, 111 W. Monroe St., Chicago, Ill. (1914)
- Norz, William Frederick, Federal Trade Commission, Washington, D. C. (1915)
- Nourse, Edwin Griswold, Fayetteville, Ark. (1911)
- NOYES, ALEXANDER DANA, The Evening Post, New York City (1899)
- Noyes, George Wallingford, Oneida, N. Y. (1911)
- +OBERLIN COLLEGE LIBRARY, Oberlin, Ohio
- OCHS, ADOLPH S., The New York Times, Times Square, New York City (1911)
- O'CONNELL, P. A., 155 Tremont St., Boston, Mass. (1912)
- O'CONNOR, HENRY GROVER, Box 193, Wayland, N. Y. (1914)
- OGBURN, WILLIAM FIELDING, Reed College, Portland, Ore. (1911)
- Ogg, Frederick Austin, 1715 Kendall Ave., Madison, Wis. (1910)
- O'GRADY, JOHN, Catholic University of America, Washington, D. C. (1916)
- O'HALLORAN, C. H., 624 Battery St., Victoria, B. C., Can. (1913)
- O'HARA, FRANK, Catholic University of America, Brookland, D. C. (1910)
- †Ohio State Library, Columbus, Ohio
- +OHIO STATE UNIVERSITY LIBRARY, Columbus, Ohio
- OHIO WESLEYAN UNIVERSITY LIBRARY, Delaware, Ohio
- OHSOL, JOHANN G., 228 Third St., N. E., Washington, D. C. (1913)
- Okami, Shinji, 42 Shirokane, Sarumachi, Shiba Ku, Tokyo, Japan (1913)
- +OKLAHOMA, UNIVERSITY OF, LIBRARY, Norman, Okla.
- OKURASHO-RIZAI-KYOKU (Department of Finance), Tokyo, Japan
- OLCOTT, DUDLEY, Albany, N. Y. (1911)
- OLDHAM, JOHN E., 35 Congress St., Boston, Mass. (1909)
- OLDS, EDWARD CLARENCE, 71 College St., New Haven, Conn. (1916)

- †OMAHA PUBLIC LIBRARY, 19th and Harney Sts., Omaha, Nebr.
- Ono, Yeijiro, Kobinada Dai machi 1 chome, Koishi Kawa-Ku, Tokyo, Japan (1915)
- †ONTARIO LEGISLATIVE LIBRARY, Toronto, Ont., Can.
- OPDYKE, WILLIAM S., 20 Nassau St., New York City (1912)
- +OREGON AGRICULTURAL COLLEGE LIBRARY, CORVAILIS, Ore.
- †OREGON, UNIVERSITY OF, LIBRARY, Eugene, Ore.
- +O'REILLY, B. J., U. S. Light and Heat Corporation, Niagara Falls, N. Y.
- †Osaka City Higher Commercial School, Osaka, Japan
- Osborn, Algernon A., Harvard Club, 27 West 44th St., New York City (1913)
- OSBORN, WILLIAM C., 71 Broadway, New York City (1910)
- OSBORNE, ROBERT SCOTT, 3515 Wyandotte St., Kansas City, Mo. (1914)
- OSBORNE, THOMAS MOTT, Auburn, N. Y. (1904)
- Osgood, Roy Clifton, First Trust and Savings Bank, First Natl. Bank Bldg., Chicago, Ill. (1904)
- Otis, Stanley L., 13 Park Row, New York City (1909)
- OTTERSON, J. E., Winchester Repeating Arms Co., New Haven, Conn. (1916)
- Overbagh, Franklin, 411 S. Clinton St., Chicago, Ill. (1914)
- Owen, Thomas M., Alabama Department of Archives and History, Montgomery, Ala. (1908)
- OWMORY, S. T., One Hundredth Bank, Ltd., Yokohama, Japan (1912)
- PACE, HOMER S., 30 Church St., New York City (1910)
- PAGE, ATWOOD COLLINS, 94 Woodland St., Hartford, Conn. (1912)
- †Page, Miss C. C., Library of Kentucky Agricultural Experiment Station, Lexington, Ky.
- PAGE, EDWARD D., Oakland, N. J. (1888)
- Page, Frederick Palmer, 49 Wall St., New York City (1911)
- PAGE, HOWARD W., 700 West End Trust Bldg., Philadelphia, Pa. (1912)
- PAGE, THOMAS WALKER, University of Virginia, Charlottesville, Va. (1900)
- Page, William Hussey, Guaranty Trust Bldg., 66 Liberty St., New York City (1912)
- +PALAMA SETTLEMENT, Honolulu, T. H.
- PALEN, RUFUS JAMES, Santa Fé, New Mexico (1911)
- \*Palgrave, Robert Harry Inglis, Henstead Hall, Wrentham, Suffolk, Eng. (1890)
- PALMER, F. A., 303 W. Main St., Morris, Ill. (1916)
- +PALO ALTO PUBLIC LIBRARY, Palo Alto, Calif.
- PAPE, WILLIAM J., The Waterbury Republican, Waterbury, Conn. (1914)
- PARK, GEORGE ARTHUR, 121 W. Ormsby Ave., Louisville, Ky. (1904)
- Park, James, 149 Broadway, New York City (1911)
- PARKER, AUBIN KATES, 2306a Stuart Ave., Richmond, Va. (1915)
- PARKER, WILLIAM, 11 Alexander St., Princeton, N. J. (1910)
- PARMELEE, JULIUS H., Bureau of Railway Economics, Washington, D. C. (1906)
- PARMELLEE, MAURICE, 115 West 43d St., New York City (1908)
- PARRY, CARL EUGENE, Ohio State University, Columbus, Ohio (1909)
- PARSONS, ARTHUR E., University Bldg., Syracuse, N. Y. (1912)
- +PASADENA PUBLIC LIBRARY, Pasadena, Calif.
  - PATTEN, FRANK CHAUNCEY, Rosenberg Library, Galveston, Texas (1904)

\*PATTEN, SIMON NELSON, University of Pennsylvania, Philadelphia, Pa. (1886)

PATTERSON, C. STUART, 1000 Walnut St., Philadelphia, Pa. (1911)

PATTERSON, ERNEST MINOR, University of Pennsylvania, Philadelphia, Pa.

PATTERSON, L. STEWART, Canadian Bank of Commerce, Sherbrooke, Que., Can. (1916)

PATTON, EUGENE BRYAN, Department of Labor, Albany, N. Y. (1908)

+PAULINE, M., St. Mary's College and Academy, Notre Dame, Ind.

PEABODY, FREDERICK F., "Greenharbour," Lake George, N. Y. (1911)

\*Peabody, George Foster, 43 Exchange Place, New York City (1902)

PEABODY INSTITUTE, Baltimore, Md.

PEARMAIN, SUMNER BASS, 53 State St., Boston, Mass. (1902)

PEAT, JAMES B., Bureau of Corporations, Washington, D. C. (1909)

PEAVEY, LEROY D., Wellesley Hills, Mass. (1910)

PEIRCE, PAUL SKEELS, State University of Iowa, Iowa City, Iowa (1909)

PEIXOTTO, JESSICA B., Cloyne Court, Berkeley, Calif. (1909)

PEKING GOVERNMENT UNIVERSITY, Peking, China

Pelletier, Victor M., 849 Beacon St., Boston, Mass. (1909)

Pemberton, Henry Augustus, 339 Monadnock Bldg., Chicago, Ill. (1911)

DE PENA, CHARLES M., 1734 N. St., Washington, D. C. (1916)

+PENNSYLVANIA LEGISLATIVE REFERENCE BUREAU, Harrisburg, Pa.

PENNSYLVANIA STATE COLLEGE, State College, Pa.

+PENNSYLVANIA STATE LIBRARY, Harrisburg, Pa.

+PENNSYLVANIA, UNIVERSITY OF, LIBRARY, Philadelphia, Pa.

PENROSE, STEPHEN B. L., Whitman College, Walla Walla, Wash. (1912)

PERLMAN, SELIG, 828 Mound St., Madison, Wis. (1915)

PERRIN, HAROLD L., 312 Washington St., Wellesley Hills, Mass. (1913)

Perrin, John, Federal Reserve Bank, San Francisco, Calif. (1911)

PERRY, LORINDA, Rockford College, Rockford, Ill. (1913)

PERRY, RAY POTTER, 17 Battery Place, New York City (1912)

PERSON, HARLOW STAFFORD, Dartmouth College, Hanover, N. H. (1901)

Persons, Charles Edward, 5933 Kingsbury Blvd., St., Louis, Mo. (1910)

Persons, Warren Milton, 213 Tyler Place, Colorado Springs, Colo. (1904)

Peters, Edward T., Box 1, Station H., S. E., Washington, D. C. (1886)

PETERS, WILLIAM L., 908 West 8th St., Riverside, Calif. (1916)

PETERSEN, ELMORE, Y. M. C. A., Pueblo, Colo. (1914)

PETTIJOHN, JOHN J., Bloomington, Ind. (1914)

PFEIFFER, FELIX, 943 Madison Ave., New York City (1911)

PHELAN, JAMES DUVAL, 1840 California St., San Francisco, Calif. (1911)

PHELAN, RAYMOND V., University of Minnesota, Minneapolis, Minn. (1905)

PHELPS, ESMOND, 708 Union St., New Orleans, La. (1911)

PHELPS, F. C., 140 New Montgomery St., San Francisco, Calif. (1915)

+PHILADELPHIA FREE LIBRARY, 13th and Locust Sts., Philadelphia, Pa.

†PHILADELPHIA, LIBRARY COMPANY OF, Juniper and Locust Sts., Philadelphia, Pennsylvania.

PHILIPPINE ASSEMBLY LIBRARY, Manila, P. I.

PHILLIPS, A. V., 6 Roanoke Ave., Jamaica Plain Mass. (1912)

PHILLIPS, CHESTER ARTHUR, 17 N. Park St., Hanover, N. H. (1915)

PHILLIPS, JOHN BURTON, Colorado Tax Commission, Denver, Colo. (1902)

PHILLIPS, JOHN MILLS, 6 Roanoke Ave., Jamaica Plain, Mass. (1912)

\*Phipps, Lawrence C., 1154 E. Colfax Ave., Denver, Colo. (1901)

\*Pigou, Arthur Cecil, King's College, Cambridge, Eng. (1908)

PILLSBURY, SAMUEL H., 14 Browne St., Brookline, Mass. (1913)

PINKHAM, ARTHUR W., 311 Western Ave., Lynn, Mass. (1915)

PITTSBURGH, UNIVERSITY OF, Pittsburgh, Pa.

PIXLEY, W. A., 18th and Douglas Sts., Omaha, Nebr. (1915)

†PLAINFIELD PUBLIC LIBRARY, Plainfield, N. J.

Plass, Herbert E., 69 S. Parkway, East Orange, N. J. (1912)

PLEHN, CARL COPPING, 2308 Warring St., Berkeley, Calif. (1891)

PLEYDELL, A. C., 29 Broadway, New York City (1909)

PLIMPTON, GEORGE ARTHUR, 70 Fifth Ave., New York City (1887)

Pollak, Francis D., 55 West 73d St., New York City (1910)

Pollek, Louise H. (Mrs. Julian A.), 625 E. Mitchell Ave., Cincinnati, Ohio (1909)

POLLEYS, THOMAS A., St. P., M. & O. Ry., St. Paul, Minn. (1911)

Pomerov, Eugene Cowles, 480 Park Ave., New York City (1914)

Pomeroy, Robert W., 1012 Fidelity Bldg., Buffalo, N. Y. (1914)

DU PONT, COLEMAN, Wilmington, Del. (1912)

Poole, De Witt CLINTON, Jr., The Consular Bureau, Department of State, Washington, D. C. (1914)

Pope, Jesse, Eliphalet, 3214 Newark St., N. W., Washington, D. C. (1900)

PORTER, A. J., Niagara Falls, N. Y. (1914)

PORTER, WILLIAM H., 56 East 67th St., New York City (1894)

PORTLAND, LIBRARY ASSOCIATION OF, Portland, Ore.

POWELL, FRED WILBUR, 261 Broadway, New York City (1911)

Powell, William H., The Welsmore, Broadway and 77th St., New York City (1912)

POWERS, HARRY HUNTINGTON, Trinity Place, Boston, Mass. (1910)

Powers, LeGrand, 3357 18th St., N. W., Washington, D. C. (1886)

Powers, Leland, Beaumont Ave., Newtonville, Mass. (1910)

Prager, Max E., Public Service Commission, 154 Nassau St., New York City (1911)

PRATT, EDWARD EWING, 1226 16th St., N. W., Washington, D. C. (1909)

+PRATT INSTITUTE FREE LIBRARY, Brooklyn, N. Y.

PRENDERGAST, WILLIAM A., 85 Eighth Ave., Brooklyn, N. Y. (1907)

PRENTISS, ELLIOTT C., El Paso, Texas (1915)

PRESTON, HAROLD, Pioneer Bldg., Seattle, Wash. (1901)

PRICE, HOMER CHARLES, Ohio State University, Columbus Ohio (1912)

PRICE, THEODORE H., 15 Wall St., New York City (1912)

PRICE, WILLIAM HYDE, 13 Reinanzaka, Akasaka ku, Tokyo, Japan (1902)

PRINCE, BENJAMIN FRANKLIN, 644 Wittenberg Ave., Springfield, Ohio (1910)

+PRINCETON UNIVERSITY LIBRARY, Princeton, N. J.

PRINCIPAL, THE, H. H., The Maharajah's College, Trivandrum, S. India

+PRINCIPAL, THE, Presidency College, Calcutta, India

Prior, Joseph H., Illinois Public Utilities Commission, I. O. O. F. Bldg., Springfield, Ill. (1912)

PROUTY, CHARLES AZRO, Newport, Vt. (1902)

+PROVINCIAL LIBRARY, Edmonton, Alta, Can.

+PROVINCIAL LIBRARY, Victoria, B. C., Can.

PRUYN, ROBERT C., 60 State St., Albany, N. Y. (1911)

Pugh, Alexander L., 161 Madison Ave., Elizabeth, N. J. (1909)

+PUNJAB UNIVERSITY LIBRARY, Senate House, Lahore, India

+PURDUE UNIVERSITY LIBRARY, Lafayette, Ind.

PURDY, LAWSON, Municipal Bldg., New York City (1900)

PUTNAM, BERTHA HAVEN, Mount Holyoke College, South Hadley, Mass.

PUTNAM, GEORGE ELLSWORTH, 1502 Mass. Ave., Lawrence, Kan. (1913)

PUTNAM, HARBINGTON, 404 Washington Ave., Brooklyn, N. Y. (1887)

PUTNAM, JAMES WILLIAM, Butler College, Indianapolis, Ind. (1905)

Pyle, J. G., 726 Globe Bldg., St. Paul, Minn. (1911)

PYNE, M. TAYLOB, Princeton, N. J. (1911)

Quinn, John, 31 Nassau St., New York City (1910)

+RADICAL CLUB, Scottdale, Pa.

+RANIER CLUB, THE, Seattle, Wash.

RANCK, SAMUEL H., Grand Rapids Public Library, Grand Rapids, Mich. (1906)

RAND, WALDRON H., 59 Temple Place, Boston, Mass. (1910)

RANDOLPH, E. F., 1654 Massachusetts Ave., Cambridge, Mass. (1890)

RANKIN, C. A., 2525 Regent St., Berkeley, Calif. (1916)

RANKIN, J. O., College of Agriculture, Columbia, Mo. (1911)

RAPER, CHARLES LEE, Chapel Hill, N. C. (1902)

RAPPARD, WILLIAM EMANUEL, Valavran, near Geneva, Switzerland (1911)

RASKOB, JOHN J., Claymont, Del. (1911)

RASTALL, BENJAMIN M., 1 Beacon St., Boston, Mass. (1908)

RATHGEN, KARL, Bellevue 59, Hamburg, Germany (1913)

RAWLES, WILLIAM A., Indiana University, Bloomington, Ind. (1900)

RAY, ROBERT JACKSON, Olivet, Mich. (1912)

RAY, WALTER T., Spartanburg, S. C. (1905)

RAYNER, ALBERT W., 1814 Eutaw Place, Baltimore, Md. (1898)

RAYNES, GEORGE W., 373 Lincoln Ave., Portsmouth, N. H. (1914)

REARICK, A. C., 71 Broadway, New York City (1910)

REDFIELD, NELSON M., 834 Prudential Bldg., Buffalo, N. Y. (1911)

+REED COLLEGE LIBRARY, Portland, Ore.

REED, HAROLD L., Cornell University, Ithaca, N. Y. (1912)

+REGISTRAR GENERAL'S OFFICE, Wellington, New Zealand

REIGHARD, JOHN J., Iowa State College, Ames, Iowa (1915)

REIN, FREDERICK E., 1201 Chestnut St., Philadelphia, Pa. (1914)

RETHERFORD, JESSE E., Pocatello, Idaho (1912)

REYNOLDS, ALLEN H., Walla Walla, Wash. (1894)

REYNOLDS, JAMES BRONSON, 151 Central Park, W., New York City (1910)

†REYNOLDS LIBRARY, Rochester, N. Y.

RHOADES, NELSON, JR., 227 H. W. Hellman Bldg., Los Angeles, Calif. (1913)

†RHODE ISLAND STATE LIBRARY, Providence, R. I.

RHODES, JAMES E., 2D, The Travelers Insurance Co., Hartford, Conn. (1915)

RICE, LLOYD PRESTON, 44 Conant Hall, Cambridge, Mass. (1915)

RICH, WESLEY EVERETT, Wesleyan University, Middletown, Conn. (1912)

RICHARDS, C. R., Cooper Union, New York City (1912)

RICHMOND, THOMAS C., Madison, Wis. (1900)

RICHTER, ERWIN EDMUND, 821 First Natl. Bank Bldg., San Francisco, Calif. (1913)

RICHTER, FREDERIC ERNEST, 60 Perkins Hall, Cambridge, Mass. (1913)

RIED, Miss H. F. H., 100 Broad St., New York City (1915)

RIFE, RALEIGH SCHUYLER, 23 Keningston St., New Haven, Conn. (1915)

RIGGS, HENRY EARLE, Room 227, New Engineering Bldg., Ann Arbor, Mich. (1913)

RILEY, ELMER A., Ohio Wesleyan University, Delaware, Ohio (1916)

RINDGE, H. C., 10 N. Ionia Ave., Grand Rapids, Mich. (1915)

RIORDON, C., Geneva St., St. Catharines, Ont., Can. (1913)

RIPLEY, WILLIAM ZEBINA, Newton Centre, Mass. (1890)

+RIPON COLLEGE LIBRARY, Ripon, Wis.

RITTENHOUSE, CHARLES F., Simmons College, Boston, Mass. (1915)

RITTER, WILLIAM E., La Jolla, San Diego Co., Calif. (1913)

RIVES, GEORGE LOCKHART, 69 East 79th St., New York City (1899)

ROBB, RUSSELL, 147 Milk St., Boston, Mass. (1911)

Robb, Willis O., 123 William St., New York City (1911)

ROBBINS, EDWARD D., 408 St. Ronan St., New Haven, Conn. (1911)

ROBBINS, EDWIN CLYDE, University of Oregon, Eugene, Ore. (1912)

ROBBINS, H. M., Minneapolis Threshing Machine Co., Hopkins, Minn. (1916)

ROBERTS, GEORGE EVAN, Ossining, N. Y. (1901)

†Robertson, James A., Dept. of Statistics, India, 1 Council House St., Calcutta, India

ROBERTSON, THOMAS M., Federal Trade Commission, Washington, D. C. (1915)

ROBINS, KINGMAN NOTT, 1201 Granite Bldg., Rochester, N. Y. (1914)

ROBINS, RAYMOND, 1437 W. Ohio St., Chicago, Ill. (1910)

ROBINSON, E. A., Worcester Felt Shoe Co., Worcester, Mass. (1916)

ROBINSON, FREDERICK B., 139th St. and Convent Ave., New York City (1908)

\*Robinson, Jane Bancroft (Mrs. George O.), 425 Cass Ave., Detroit, Mich. (1893)

Robinson, Leland Rex, 79 Carnegie Ave., East Orange, N. J. (1916)

Robinson, Leonard G., 174 Second Ave., New York City (1913)

Robinson, Louis Newton, Swarthmore, Pa. (1909)

ROBINSON, MAURICE HENRY, University of Illinois, Urbana, Ill. (1899)

Robinson, Myron W., 377 Broadway, New York City (1912)

ROBINSON, SANFORD, 32 Nassau St., New York City (1915)

ROBINSON, WILLIAM ASA, Adrian College, Adrian, Mich. (1912)

†ROCHESTER UNIVERSITY LIBRARY, Rochester, N. Y.

+ROCKFORD COLLEGE LIBRARY, Rockford, Ill.

Rogeris, Charles B., 91 Genesee St., Utica, N. Y. (1893)

ROGERS, EMMA WINNER (Mrs. Henry Wade), 413 Orange St., New Haven, Conn. (1890)

Rogers, George M., 87 Wadena St., E. C., Cleveland, Ohio (1913)

Rogers, James Harvey, Yale Station, New Haven, Conn. (1915)

DE ROODE, ALBERT, 52 Wall St., New York City (1911)

Root, Louis Carroll, 7610 Nelson St., New Orleans, La. (1894)

ROSENBAUM, MORRIS, 605 South 3d St., Philadelphia, Pa. (1911)

ROSENFELD, JESSE F., 9 West 89th St., New York City (1916)

ROSENTHAL, LESSING, Suite 1400, Ft. Dearborn Bldg., Chicago, Ill. (1891)

ROSENWALD, JULIUS, Sears, Roebuck & Co., Chicago, Ill. (1910)

ROSEWATER, VICTOR, Omaha Bee, Omaha, Nebr. (1892)

Ross, Adam A., 1209 Morris Bldg., Philadelphia, Pa. (1909)

Ross, Edward Alsworth, Madison, Wis. (1892)

Ross, EDWIN B., 515 Rogers Bldg., Vancouver, B. C., Can. (1916)

Ross, T. Edward, 1209 Morris Bldg., Philadelphia, Pa. (1911)

Ross, WILLIAM L., Second Ward Savings Bank, Milwaukee, Wis. (1915)

Rossetti, V. H., Farmers and Merchants Natl. Bank, Los Angeles, Calif.

ROSSITER, W. S., 4 Court St., Concord, N. H. (1906)

ROSSMAESSLER, WILLIAM R., 4015 Clarissa St., Philadelphia, Pa. (1912)

ROTH, LESTER, 195 Broadway, New York City (1911)

ROTZEL, CLARE LEO, University of Minnesota, Minneaoplis, Minn. (1913)

RUBINOW, I. M., 131 East 23d St., New York City (1905)

RUFENER, LOUIS A., 1062 E. Main St., Galesburg, Ill. (1914)

RUGGLES, CLYDE ORVAL, Ohio State University, Columbus, Ohio (1911)

RUNKLE, DELMER, Lock Box B, Hoosick Falls, N. Y. (1915)

RUPPRECHT, F. K., 79 Worth St., New York City (1916)

RUSHTON, JOSEPH HOWARD, 930 North 36th St., Omaha, Nebr. (1911)

Russell, Charles J., 3422 Disston St., Tacony, Philadelphia, Pa. (1911)

Russell, Frederic Arthur, 903 Gregory Place, Urbana, Ill. (1913)

Russell, James S., Lawrenceville, Va. (1911)

RUSSELL, PHILIP W., 14 Wall St., New York City (1913).

+Russell Sage Foundation Library, 130 East 22d St., New York City

RUTTER, FRANK R., Bureau of Foreign and Domestic Commerce, Department of Commerce, Washington, D. C. (1896)

RYAN, JOHN A., Catholic University, Washington, D. C. (1906)

RYDEN, GEORGE H., Bethany College, Lindsborg, Kan. (1914)

RYMAN, JAMES H. T., Missoula, Mont. (1892)

SABY, R. S., Cornell University, Ithaca, N. Y. (1914)

SACHS, RALPH L., 28 West 22d St., New York City (1909)

SACK, ISIDOR, 1029 College Ave., New York City (1915)

+SACRAMENTO FREE PUBLIC LIBRARY, Sacramento, Calif.

Sadd, W. A., Chattanooga Savings Bank, Chattanooga, Tenn. (1911)

SAGE, DEAN, 49 Wall St., New York City (1909) .

St. John, Howell W., Aetna Life Insurance Co., Hartford, Conn. (1915)

†St. Louis Public Library, St. Louis, Mo.

+ST. PAUL PUBLIC LIBRARY, St. Paul, Minn.

SAKAMOTO, JAMES GIKO, 216 West 23d St., Los Angeles, Calif. (1915)

Sakolski, A. M., Delaware & Hudson Co., Albany, N. Y. (1904)

Saliers, Earl Adolphus, Sheffield Scientific School, New Haven, Conn. (1909)

SANBORN, JOHN BELL, Madison, Wis. (1896)

Sanders, Frederic W., 1361 Sutherland St., Los Angeles, Calif. (1914)

Sands, George P., Chapin-Sacks Mnfg. Co., Washington, D. C. (1915)

+SAN FRANCISCO FREE PUBLIC LIBRARY, Hayes and Franklin Sts., San Francisco, Calif.

+SAN FRANCISCO NEWS COMPANY, 747 Howard St., San Francisco, Calif.

\*Sanger, William Cary, Sangerfield, N. Y. (1890)

Sano, Zensaku, Higher Commercial School, Tokyo, Japan (1899)

†SAN PEDRO PUBLIC LIBRARY, San Pedro, Calif.

SARGENT, DUDLEY A., 27 Everett St., Cambridge, Mass. (1911)

SARGENT, WILLIAM D., Oak St., Bayonne, N. J. (1911)

SARGENT, ZIEGLER, 247 Church St., New Haven, Conn. (1911)

†Saskatchewan, University of, Library, Saskatoon, Sask., Can.

Sato, Sozaburo, Jap. Y. M. C. A., Kotobuki Road, Japanese Concession, Tientsin, China (1911)

SAUTER, WILLIAM F., 2305 N. Broad St., Philadelphia, Pa. (1888)

SAVAGE, HENRY W., 108 West 45th St., New York City (1911)

SAWYER, ROLLIN ALGER, JR., 476 Fifth Ave., New York City (1915)

Scala, Luigi, Independence, La. (1916)

Schaffner, Joseph, 4819 Greenwood Ave., Chicago, Ill. (1909)

Schaffner, Margaret A., 6047 Ellis Ave., Chicago, Ill. (1905)

SCHENK, HENRY H., Memphis, Mo. (1914)

Schiff, Jacob H., 52 William St., New York City (1910)

Schiller, William B., Frick Bldg., Pittsburgh, Pa. (1913)

SCHMID, JOHN F., 16 Wall St., New York City (1914)

SCHMIDLAPP, JACOB G., Cincinnati, Ohio (1911)

SCHMIDT, LOUIS B., Iowa State College, Ames, Iowa (1915)

SCHMITT, ALFRED C., First National Bank, Albany, Ore. (1905)

SCHNIEWIND, HEINRICH, JR., 18 West 18th St., New York City (1913)

Schoellkoff, Paul Arthur, Niagara Falls, N. Y. (1914)

Scholz, Emil Maurice, 20 Vesey St., New York City (1916)

SCHRIMSHAW, STEWART, 617 State St., Madison, Wis. (1913)

SCHURMAN, JACOB GOULD, Cornell University, Ithaca, N. Y. (1910)

SCHWAMB, PETER, 33 Academy St., Arlington, Mass. (1912)

Schwarzenbach, R. J. F., 470 Fourth Ave., New York City (1914)

\*Scott, Austin, New Brunswick, N. J. (1890)

Scott, Charles R., 120 Broadway, New York City (1908)

Scorr, Leroy, 84 Grove St., New York City (1914)

Scorr, S. C., Room 909, Union Station, Pittsburgh, Pa. (1911)

Scott, Walter, 495 Broadway, New York City (1916)

Scott, William Amasa, Madison, Wis. (1888)

Scovell, C. H., 119 Grasmere St., Newton, Mass. (1909)

Scovill, Hiram Thompson, 305 Commerce Bldg., Urbana, Ill. (1914)

Scripps, E. W., Miramar, Calif. (1912)

Scroggs, William Oscar, Louisiana State University, Baton Rouge, La. (1910)

\*Scudder, Doremus, Honolulu, T. H. (1890)

Scull, Charles O., Roland Park, Baltimore, Md. (1911)

Scull, John L., Haverford, Pa. (1913)

SEABERG, HUGO, Raton, New Mexico (1912)

\*Seager, Henry Rogers, Columbia University, New York City (1888)

SEALY, JOHN, 25 South Wharf, St. John, N. B., Can. (1911)

SEARLE, H. F., 52 Broadway, New York City (1910)

+SEATTLE PUBLIC LIBRARY, Seattle, Wash.

SEBRING, CHARLES L., Sebring, Ohio (1913)

†Secretary, Industries and Commerce Committee, Mysore Economic Conference, Bangalore, India

Secrist, Horace, 811 Gaffield Place, Evanston, Ill. (1909)

Sedewick, Lee M., Coates House, 10th and Broadway, Kansas City, Mo. (1911)

Serriev, Homer Horatio, Iowa State Teachers College, Cedar Falls, Iowa (1910)

SEITZ, EDWARD D., TRAFFORD, Westmoreland Co., Pa. (1916)

Selby, Roger A., Portsmouth, Ohio (1910)

\*Seligman, Edwin Robert Anderson, 324 West 86th St., New York City (1886)

\*Seligman, Isaac Newton, 36 West 54th St., New York City (1887)

Seligman, Jefferson, J. & W. Seligman Co., New York City (1910)

Sellers, Alexander, 1600 Hamilton St., Philadelphia, Pa. (1911)

Selling, Bernard B., 503 Hammond Bldg., Detroit, Mich. (1910) Sells, Dorothy, 1769 Columbia Road, Washington, D. C. (1916)

Serrill, Charles Lloyd, 428 Chestnut St., Philadelphia, Pa. (1909)

Seubert, Rudolph F., Chemische Fabrik Knoll & Co., Ludwigshafen a/Rhein, Germany (1912)

SEYMOUR, EDMUND BAYLY, 1001 Chestnut St., Philadelphia, Pa. (1911)

SHAILER, FRANK ALTON, Insular Life Assurance Co., Manila, P. I. (1915)

SHALLENBERGER, W. E., Canton, III. (1915)

SHARFMAN, ISAIAH LEO, 1607 S. University Ave., Ann Arbor, Mich. (1914)

SHATTUCK, JOSEPH, JR., 24 Exchange Place, New York City (1909)

SHAW, A. W., Winnetka, Ill. (1909)

Shaw, Albert, Review of Reviews, 30 Irving Place, New York City (1886)

SHEARN, CLARENCE J., 140 Nassau St., New York City (1911)

SHEETS, BEATRICE H., 298 Woodland Ave., Columbus, Ohio (1909)

SHEFFEY, EDWARD F., II., Lynchburg, Va. (1915)

SHELTON, HENRY WOOD, 35 College St., Hanover, N. H. (1916)

Shepherd, R. P., 1415 Mallers Bldg., Chicago, Ill. (1911)

Sheridan, Frank J., Bureau of Foreign and Domestic Commerce, Dept. of Commerce, Washington, D. C. (1910)

SHERLEY, SWAGAR, House of Representatives, Washington, D. C. (1913)

SHERMAN, JOHN HARVEY, 313 District Bldg., Washington, D. C. (1911)

+Shilthuis, W., E 25, Produce Exchange, New York City

Shipway, George W., 520 Greenwood Ave., Richmond Hill, L. I., N. Y. (1913)

SHOEMAKER, JAMES H., Cedar Falls, Iowa (1916)

SHORTT, ADAM, Civil Service Commission, Ottawa, Ont., Can. (1898)

Shriver, George M., B. & O. R. R. Co., Baltimore, Md. (1911)

Shughue, Martin J., Massachusetts Institute of Technology, Boston, Mass. (1914)

SILBERLING, NORMAN JOHN, 51 Prentiss St., Cambridge, Mass. (1915)

SILLMAN, JOSEPH, Michigan Smelting and Refining Co., Detroit, Mich. (1914)

Simes, William, Box 3084, Boston, Mass. (1894)

SIMKHOVITCH, VLADIMIR G., Columbia University, New York City (1901)

SIMMONS, E. G., Whitney Central Bldg., New Orleans, La. (1916)

SIMON, FREDERICK M., 4168 W. Pine Blvd., St. Louis, Mo. (1912)

SIMPSON, EDWARD C., 44 The Ardmore, Indianapolis, Ind. (1912)

SIMPSON, HERBERT DOWNS, 2202 Van Hise Ave., Madison, Wis. (1911)

SIMPSON, JOHN R., 426 Washington St., Boston, Mass. (1911)

Sine, F. E., 906 8th Ave., West, Calgary, Alta, Can. (1915)

Sioussar, St. George Leakin, Vanderbilt University, Nashville, Tenn. (1911)

+Sioux City Public Library, Sioux City, Iowa.

SKAGGS, WILLIAM H., 815 Beuna Ave., Chicago, Ill. (1911)

SKELTON, OSCAR DOUGLAS, Queen's University, Kingston, Ont., Can. (1909)

Skoss, Solomon L., 1424 Raleigh St., Denver, Colo. (1913)

SMEATON, J. V., 224 Pennington Ave., Passaic, N. J. (1911)

SMITH, A. F., Box 92, Middletown, Ohio (1911)

SMITH, C. HENRY, Bluffton, Ohio (1912)

SMITH, CHANNING, Cherry Valley, Mass. (1914)

+SMITH COLLEGE LIBRARY, Northampton, Mass.

SMITH, DELAVAN, Lake Forest, Ill. (1901)

SMITH, EDWARD S., Warren, Ohio (1914)

SMITH, FREDERICK M., Box 255, Independence, Mo. (1912)

SMITH, GEORGE C., 45 Cedar St., New York City (1911)

SMITH, GUY CARLETON, New Hampshire College, Durham, N. H. (1912)

SMITH, HAL H., 1124 Ford Bldg., Detroit, Mich. (1911)

SMITH, HARRY EDWIN, 4504 16th Ave., N. E., Seattle, Wash. (1913)

\*Smith, Jacob George, 519 Stolp Ave., Syracuse, N. Y. (1903)

SMITH, JAMES B., California, Pa. (1911)

SMITH, J. RUSSELL, Swarthmore, Pa. (1914)

SMITH, JULIUS, 1811 Vilas St., Madison, Wis. (1915)

SMITH, K. WARD, 78 S. Pryor St., Atlanta, Ga. (1912)

SMITH, MARK A., 44 Langdon St., Cambridge, Mass. (1912)

SMITH, ROBERT WILLIAMS, Beta Theta Pi House, Amherst, Mass (1916)

SMITH, WALTER D., Cor. Manlius and Genesee Sts., Fayetteville, N. Y. (1913)

SMYTH, ISAAC S., JR., 6123 Greene St., Germantown, Philadelphia, Pa. (1911)

SMYTH, WILLIAM HENRY, Fernwald, Berkeley, Calif. (1914)

SNIDER, GUY EDWARD, 511 West 112th St., New York City (1915)

Snow, F. Herbert, State Capitol, Harrisburg, Pa. (1912)

SNYDER, FREDERIC S., 55 Blackstone St., Boston, Mass. (1914)

SNYDER, JOHN WHITELEY, California George Junior Republic, Chino, Calif. (1914)

SNYDER, LEROY EDWIN, 501 Arlington Bldg., Rochester, N. Y. (1916)

Soda, Kiichiro, The Soda Bank, Minaminaka-dori I. 2, Yokohama, Japan

SOLOMONT, JAMES, 18 Tremont St., Boston, Mass. (1912)

SOMMER, FRANK H., Kinney Bldg., Newark, N. J. (1914)

+South Australia, The Public Library of, Adelaide, S. Australia

+South Dakota Free Library Commission, Pierre, S. Dak.

+South Dakota State College Library, Brookings, S. Dak.

SOUTH DAKOTA TAX COMMISSION, Pierre, S. Dak.

+South Dakota, University of, Library, Vermillion, S. Dak.

†Southern California, University of, Library, Los Angeles, Calif.

†Southern Methodist University Library, Dallas, Texas

SPALDING, PHILIP L., 50 Oliver St., Boston, Mass. (1913)

SPALDING, S. M., 1008 Securities Bldg., Los Angeles, Calif. (1912)

SPEDDEN, ERNEST RADCLIFFE, 1201 Poplar Grove St., Baltimore, Md. (1911)

SPENCE, LEWIS J., 165 Broadway, New York City (1914)

+SPOKANE PUBLIC LIBRARY, Spokane, Wash.

Sprague, Oliver M. W., 32 Bates St., Cambridge, Mass. (1900)

Sprague, Robert James, Amherst, Mass. (1913)

\*Sprague, Rufus F., Greenville, Mich. (1890)

Squire, Andrew, 1201 Leader-News Bldg., Cleveland, Ohio (1911)

STAATS, WALTER J., Merchantville, N. J. (1910)

STADELMAN, FREDERIC, 50 Church St., New York City (1912)

STALEY, FRANK S., Minneapolis Civic and Commerce Association, Minneapolis, Minn. (1914)

\*STANLEY, FRANCIS EDGAR, Newton, Mass. (1912)

STARR, HOWARD W., Mountain Road, Englewood, N. J. (1916)

STATE NORMAL SCHOOL, Platteville, Wis.

+STATE PARLIAMENTARY LIBRARY, Melbourne, Victoria, Australia

STEARNS, FRANK W., 140 Tremont St., Boston, Mass. (1915)

STEELE, GEORGE FRANCIS, Room 604, 18 East 41st St., New York City (1911)

+STEIGER, E. & Co., Box 0298, New York City

STEIN, HERMAN M., 2147 Honeywell Ave., Bronx, New York City (1915)

STEINER, BERNARD C., Enoch Pratt Free Library, Baltimore, Md. (1910)

STEINER, WILLIAM HOWARD, 219 East 71st St., New York City (1916)

Stephens, George Asbury, University of Nebraska, Lincoln Nebr. (1912)

STEPHENS, GEORGE WARE, Orono, Me. (1909)

STERN, EDGAR BLOOM, 5115 St. Charles Ave., New Orleans, La. (1911)

STERNS, WORTHY PUTNAM, 1833 Lamont St., Washington, D. C. (1901)

STERRETT, J. E., 54 William St., New York City (1909)

STETSON, FRANCIS LYNDE, 15 Broad St., New York City (1909)

STEUART, WILLIAM M., 3725 Morrison St., N. W., Washington, D. C. (1898)

STEVENS, B. F. & BROWN, 4 Trafalgar Square, London, Eng.

STEVENS, JAMES G., The University Club, Urbana, Ill. (1915)

STEVENS, RICHARD, 1 Newark St., Hoboken, N. J. (1911)

STEVENS, W. H. S., Tulane University, New Orleans, La. (1911)

Stewart, Charles Leslie, 309 Commerce Bld., University of Illinois, Urbana, Ill. (1912)

STEWART, HAMILTON, Farmers' Bank Bldg., Pittsburgh, Pa. (1911)

STEWART, JOHN LAMMEY, Lehigh University, South Bethelehem, Pa. (1887)

Stewart, William Downie, Dunedin, New Zealand (1912)

STITES, SARA HENRY, Simmons College, Boston, Mass. (1912)

+STOCKTON, CHARLES W., Wells Fargo & Co., 51 Broadway, New York City

STOCKTON, FRANK TENNEY, Indiana University, Bloomington, Ind. (1909)

STOCKWELL, HERBERT G., 831 Land Title Bldg., Philadelphia, Pa. (1910)

STOKES, J. G. PHELPS, Stamford, Conn. (1911)

STONE, ALFRED HOLT, Dunleith, Miss. (1900)

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STONE, CHARLES A., 147 Milk St., Boston, Mass. (1912)

STONE, GALEN L., 87 Milk St., Boston, Mass. (1909)

STONE, NAHUM I., 8415 13th Ave., Brooklyn, N. Y. (1899)

STONE, W. J., 341 N. Brand Blvd., Glendale, Calif. (1916)

STORMS, FRANK H., Stock Exchange Bldg., Philadelphia, Pa. (1916)

STORROW, JAMES J., 44 State St., Boston, Mass. (1909)

STRATER, CHARLES G., Box 589, Louisville, Ky. (1912)

STRAUS, OSCAR SOLOMON, Box 1000, New York City (1886)

STRAUS, PERCY S., R. H. Macy & Co., Herald Square, New York City (1916)

STREET, HARVEY L., II, 406 Grand Ave., Brooklyn, N. Y. (1913)

STREETER, THOMAS WINTHROP, Shawmut Bank Bldg., Boston, Mass. (1912)

STREIGHTOFF, FRANK HATCH, Greencastle, Ind. (1910)

+STRIETMANN, A. J., S. E. Cor. 12th and Plum Sts., Cincinnati, Ohio

Strong, Benjamin, Jr., Federal Reserve Bank, 19 Nassau St., New York City (1913)

STROOCK, Sol M., 30 Broad St., New York City (1909)

STUART, WILLIAM C., First Natl. Bank Bldg., Newport News, Va. (1915)

†Subbakao, N. S., Maharajah's College, Mysore, India

Subercaseaux, Guillermo, Santiago, Chile, S. A. (1913)

SUFFERN, ARTHUR E., 1245 Prairie Ave., Beloit, Wis. (1914)

SULZBERGER, CYRUS L., 516 West End Ave., New York City (1904)

†Sumino, Shiro, C/o H. I. J. M. "Destroyer Ariake," Japan

SUMNER, GEORGE STEDMAN, Claremont, Calif. (1905)

SUMNER, HELEN L., 1519 20th St., N. W., Washington, D. C. (1903)

SUTER, GEORGE A., 190 Riverside Drive, New York City (1913)

SUTHERLAND, E. H., 420 N. Leonard St., Liberty, Mo. (1915)

Suzzallo, Henry, University of Washington, Seattle, Wash. (1914)

SWANSON, ARTHUR E., 522 Church St., Evanston, Ill. (1915)

SWANSON, WILLIAM WALKER, Queen's University, Kingston, Ont., Can. (1913)

†Swarthmore College Library, Swarthmore, Pa.

SWAYZE, FRANCIS J., 765 High St., Newark, N. J. (1905)

SWAYZE, JOHN L., 15 Dey St., New York City (1913)

Sweney, Fred William, 641 Lexington Place, N. W., Washington, D. C. (1915)

Swenson, John Canute, Provo, Utah (1909)

SWIFT, WILLIAM H., 1309 Delaware Ave., Wilmington, Del. (1911)

Swope, Gerard, 463 West St., New York City (1911)

Sylvester, F. M., 718 Granville St., Vancouver, B. C., Can. (1915)

+Syracuse Public Library, Syracuse, N. Y.

†Syracuse University Library, Syracuse, N. Y.

+Tacoma Public Library, Tacoma Ave., Tacoma, Wash.

Takagi, Senjiro, Dept. of Economics, Keiogijuku University, Tokyo, Japan (1914)

†Takemura, Kinjiro, 27 Masagocho, Hongo, Tokyo, Japan

Tamura, Teijiro, 4509 14th Ave., N. E., Seattle, Wash. (1914)

TANSEY, GEORGE JUDD, 400 S. Broadway, St. Louis, Mo. (1915)

TARBELL, IDA M., 132 East 19th St., New York City (1903)

Taussic, Benjamin J., 3747 Washington Ave., St. Louis, Mo. (1909)

TAUSSIG, FRANK WILLIAM, 2 Scott St., Cambridge, Mass. (1887)

TAUSSIG, RUDOLPH JULIUS, 200 Mission St., San Francisco, Calif. (1904)

TAYLOR, ARCHIBALD W., 1455 Undercliff Ave., New York City (1915)

TAYLOR, FRED MANVILLE, 527 Church St., Ann Arbor, Mich. (1892)

TAYLOR, GRAHAM, Chicago School of Civics and Philanthropy, 2559 S. Michigon Ave., Chicago, Ill. (1890)

TAYLOR, HENRY CHARLES, College of Agriculture, Madison, Wis. (1903)

TAYLOR, JOHN, The Bryant Electric Co., Bridgeport, Conn. (1911)

- TAYLOR, SAMUEL ALFRED, 804 Lewis Block, Pittsburgh, Pa. (1911)
- TAYLOR. THOMAS ROTHWELL, 5511 University Ave., Chicago, Ill. (1912)
- TAYLOR, WILLIAM GEORGE LANGWORTHY, 435 N. 25th St., Lincoln, Nebr. (1894)
- Templeton, W. L., The Quaker Oats Company, 1600 Railway Exchange, Chicago, Ill. (1915)
- +Tennessee, University of, Library, Knoxville, Tenn.
- +Texas State Library, Austin, Texas
- +Texas, University of, Library, Austin, Texas
- +Texas, University of, Loan Library, Austin, Texas
- THACKARA, ALEXANDER M., American Consulate General, Paris, France (1915)
- \*THOM, DE COURCEY WRIGHT, 119 E. Baltimore St., Baltimore, Md. (1900)
- THOMAS, GEORGE, 217 East Fourth North St., Logan, Utah (1909)
- THOMAS, J. T., Grenada Bank, Grenada, Miss. (1916)
- THOMPSON, CARL WILLIAM, Department of Agriculture, Washington, D. C. (1909)
- THOMPSON, CHARLES M., Commerce 311, Urbana, Ill. (1913)
- THOMPSON, GEORGE W., Box 495, Connellsville, Pa. (1914)
- THOMPSON, HOLLAND, College of the City of New York, New York City (1912)
- THOMPSON, JOHN GIFFIN, 307 W. Illinois St., Urbana, Ill. (1907)
- THOMPSON, M. W., Bankers Trust Bldg., 14 Wall St., New York City (1911)
- THOMSON, EDWARD H., 1417 Belmont St., Washington, D. C. (1916)
- THOMSON, WILLIAM ORVILLE, Raymond, Wash. (1912)
- THORNDIKE, EDWARD L., Teachers College, Columbia University, New York City (1915)
- THORNE, CLIFFORD, State House, Des Moines, Ia. (1914)
- THORNLEY, WILLIAM H., 38 Cushing St., Providence, R. I. (1911)
- THURBER, CHARLES HERBERT, 29 Beacon St., Boston, Mass, (1901)
- TIEBOUT, CORNELIUS H., JR., 99 Commercial St., Brooklyn, N. Y. (1914)
- Timlin, W. H., 1600 Grand Ave., Milwaukee, Wis. (1894)
- TIMOLAT, JAMES G., Red Bank, N. J. (1911)
- TINSLEY, RICHMOND PARRAN, 26 Broadway, New York City (1910)
- TIRRELL, WINTHROP, High School of Commerce, Boston, Mass. (1912)
- Todd, Edwin S., Miami University, Oxford, Ohio (1907)
- †Тоноки Імревіац University, Agricultural College, Sapporo, Hokkaido, Japan
- †Tokyo Bankers' Association, Sakamoto-Cho, Nihonbashi, Tokyo, Japan
- TOKYO HIGHER COMMERCIAL SCHOOL, Kanda, Tokyo, Japan
- †Токуо Імрекіац University, Seminary of Political Economy, College of Law, Tokyo, Japan
- +Toledo Public Library, Toledo, Ohio
- Tolles, E. Leroy, 149 Broadway, New York City (1915)
- Tomkins, Calvin, 30 Church St., New York City (1912)
- †Toronto, University of, Library, Toronto, Ont., Can.
- TOSDAL, HARRY R., 59 Perkins Hall, Cambridge, Mass. (1914)
- Towles, John Ker, University of Cincinnati, Cincinnati, Ohio (1909)
- Towne, Ezra Thayer, Carleton College, Northfield, Minn. (1905)
- Towner, Rutherford H., 62 William St., New York City (1904)
- TRENHOLM, Miss M. DEG., 540 East 76th St., New York City (1910)
- TRENT, RAY S., 411 S. Fess Ave., Bloomington, Ind. (1915)
- TROWBRIDGE, RUTHERFORD, 46 Hillhouse Ave., New Haven, Conn. (1911)

TRUMBOWER, HENRY R., Madison, Wis. (1905)

Tsang, Kwong Sheung, 5 Racecourse Road, Tientsin, China (1916)

TUCKER, DONALD SKEELE, 502 West 113th St., New York City (1912)

Tucker, Robert H., Lexington, Va. (1912)

Tucker, Rufus Stickney, 507 Elm St., Ann Arbor, Mich. (1912)

Tuckerman, Paul, 59 Wall St., New York City (1913)

TUCKEY, EDSON NEWTON, Willard Courts, N. W., Washington, D. C. (1901)

TUFTS COLLEGE LIBRARY, Tufts College, Mass.

TULANE UNIVERSITY LIBRARY, New Orleans, La.

TURNBULL, JOHN, 2 Place d'Armes, Montreal, Que., Can. (1913)

Turner, John Roscoe, New York University School of Commerce, 32 Waverly Place, New York City (1909)

Turrell, Edgar Abel, 6 East 45th St., New York City (1909)

TUTHILL, EDWARD, 253 S. Lime St., Lexington, Ky. (1910)

TUTTLE, CHARLES AUGUSTUS, Wesleyan University, Middletown, Conn. (1887)

TUTTLE, GEORGE H., Box 179, New Haven, Conn. (1911)

TUTTLE, PIERSON MUIR, Rockaway, N. J. (1915)

TWIETMEYER, A., Buchhandlung, Leipzig, Germany

TYLER, CORNELIUS BOARDMAN, 30 Church St., New York City (1913)

†Туомієв, Ривівніма Со., 601 Tower Ave., Superior, Wis. Uсніке, Renkichi, Kobe Higher Commercial School, Kobe, Japan (1916)

Ullman, Isaac M., 558 Whitney Ave., New Haven, Conn. (1909)

Underhill, C. M., Utica Public Library, Utica, N. Y. (1903)

Underwood, Henry O., 52 Fulton St., Boston, Mass. (1913)

Underwood, Joseph Harding, The University, Missoula, Mont. (1911)

+Union College Library, Schenectady, N. Y.

+UNITED STATES DEPARTMENT OF AGRICULTURE, Washington, D. C.

+UNIVERSITY CLUB LIBRARY, Fifth Ave. and 54th St., New York City

+University Library, Adelaide, South Australia

+University Library, Sydney, N. S. W., Australia

UPHAM, FREDERIC WILLIAM, 220 S. State St., Chicago, Ill. (1901) UPRICHARD, JOHN, 212 W. Washington St., Chicago, Ill. (1915)

URSCHEL, J. J., Woodville Lime and Cement Co., Toledo, Ohio (1911)

Usher, Abbott Payson, Cornell University, Ithaca, N. Y. (1911)

Vall, Theodore Newton, The Valencia, 150 West 59th St., New York City (1913)

Valgren, Victor Nelson, 1810 G. St., N. W., Washington, D. C. (1910) Valiton, Peter C., Valiton Brothers Co., Deer Lodge, Mont. (1916)

Van Alstyne, David, 105 West 40th St., New York City (1912)

Van Antwerp, William C., 15 Broad St., New York City (1912)

Vanderblue, Homer B., 412 Northwestern University Bldg., Chicago, Ill. (1911)

VANDERLIP, FRANK ARTHUR, 55 Wall St., New York City (1904)

Van Deusen, W. M., Natl. Newark Banking Co., Newark, N. J. (1915)

VAN KLEECK, MARY, 130 East 22d St., New York City (1916) VAN METER, ARTHUR, 480 Wilson Ave., Columbus, Ohio (1912)

Van Riper, Walker, First Natl. Bank Bldg., Denver, Colo. (1916)

+VERMONT STATE LIBRARY, Montpelier, Vermont

+VERMONT, UNIVERSITY OF, LIBRARY, Burlington, Vermont

VERRILL, CHARLES H., Bureau of Labor Statistics, Washington, D. C. (1911)

VERBILL, H. M., 72 Bowdoin St., Portland, Me. (1909)

VICKERS, ENOCH HOWARD, 748 University Terrace, Morgantown, W. Va. (1902)

VILLARAN, MANUEL V., Ayacucho 410, Lima, Peru (1912)

VINCENT, GEORGE EDGAR, 1005 Fifth St., S. E., Minneapolis, Minn. (1901)

VINSON, Z. T., Huntington, W. Va. (1914)

VIRGINIA STATE LIBRARY, Richmond, Va.

VIRTUE, GEORGE OLIEN, University of Nebraska, Lincoln, Nebr. (1893)

VOEGELIN, F. E., 18 Waterbury Road, Upper Montclair, N. J. (1912)

VOGELSTEIN, THEODOBE MAX, Kurfürstenstrasse 128, Berlin, W., Germany (1907)

VOOT, PAUL LEROY, Ohio State University, Columbus, Ohio (1909)

VROOMAN, CARL S., Department of Agriculture, Washington, D. C. (1911)

+WABASH COLLEGE LIBRARY, Crawfordsville, Ind.

WADLIN, HORACE G., 118 Woburn St., Reading, Mass. (1893)

WAGEL, SRINIVAS R., Hotel Plaza, New York City (1916)

WAGNER, ADOLPH, University of Berlin, Berlin, Germany (1887)

WAGNER, ARCHIBALD, 1712 S. Dupont Ave., Minneapolis, Minn. (1914)

WAGNER, NAPOLEON, 1101 Emerson St., Denver, Colo. (1915)

WALDEN, Mrs. PERCY TALBOT, 210 St. Ronan St., New Haven, Conn. (1901)

WALKER, FRANCIS, Bureau of Corporations, Washington, D. C. (1895)

WALKER, GUSTAVUS A., 324 S. Broadway, Tarrytown, N. Y. (1913)

WALKER, THADDEUS, Walkerville, Ont., Can. (1913)

WALKER, THOMAS BARLOW, 807 Hennepin Ave., Minneapolis, Minn. (1901)

Wall, W. E., 1087 West 11th St., Cleveland, Ohio (1916)

Wallace, Charles F., 1504 Commerce St., Dallas, Texas (1915)

WALLACE, GEORGE M., 478 Orange St., New Haven, Conn. (1911)

+WALLACE'S FARMER, Des Moines, Iowa

Walling, William English, 116 Field Point Road, Greenwich, Conn. (1901)

Wallis, Robert Norcross, Fitchburg, Mass. (1910)

WALRADT, HENRY FREEMAN, Ohio State University, Columbus, Ohio (1911)

\*Walsh, Correa Moylan, Bellport, L. I., N. Y. (1901)

WALTER, WILLIAM E., Rutherford, N. J. (1913)

WARBURG, F. M., 52 William St., New York City (1901)

WARD, W. E., 2020 Cornell Road, Cleveland, Ohio (1915)

WARD, WILLIAM C., 15 Wall St., New York City (1915)

WARDWELL, ALLEN, 15 Broad St., New York City (1912)

WARE, Moses Weld, 12 Edgehill St., Princeton, N. J. (1912)

Warfield, George Alfred, University of Denver, University Park, Colo. (1912)

WARNE, FRANK JULIAN, Cosmos Club, Washington, D. C. (1915)

WARNER, C. B., 404 Riverside Drive, New York City (1912)

WARNER, PHILIP J., 1234 Ave. U, Brooklyn, N. Y. (1911)

WARNER, SAM BASS, 2590 Green St., San Francisco, Calif. (1914)

WARREN, BENTLEY W., 30 State St., Boston, Mass. (1908)

WARREN, Mrs. CATHERINE C., 133 Library Place, Princeton, N. J. (1919)

WARREN, FISKE, "Eildonshiel," Harvard, Mass. (1915)

WARREN, HENRY KIMBALL, Yankton College, Yankton, S. Dak. (1912)

WARREN, HOWARD P., University of Cincinnati, Cincinnati, Ohio (1915)

Warren, William C., 432 W. Stafford St., Germantown, Pa. (1915)

+Waseda University, Library of, Tokyo, Japan

+Washington, State College of, Library, Pullman, Wash.

†Washington State Library, Olympia, Wash.

†Washington University Library, St. Louis, Mo.

+Washington, University of, Library, Seattle, Wash.

†Washington and Lee University, Library of, Lexington, Va.

WASSAM, CLARENCE W., State University of Iowa, Iowa City, Iowa (1909) WATERBURY, C. L., 25 East 24th St., New York City (1915)

Waterhouse, S. W., 474 North 1st St., San José, Calif. (1911)

WATKINS, GEORGE P., Public Service Commission, 120 Broadway, New York City (1901)

WATKINS, MYRON W., 306 Bryant Ave., Ithaca, N. Y. (1915)

Watson, Frank Dekker, 5 College Ave., Haverford, Pa. (1908)

Warson, R. A., 11 Broadway, New York City (1913)

WATSON, WILLIAM A., 187 Marlborough Road, Brooklyn, N. Y. (1904)

Weatherley, Ulysses Grant, Indiana University, Bloomington, Ind. (1901)

Weaver, E. P., The Globe Inspection Co., Denver, Colo. (1914)

Weaver, James Riley, De Pauw University, Greencastle, Ind. (1890)

Webb, Ernest Clay, 4263d Juniata St., St. Louis, Mo. (1913)

Webb, H. St. John, 162 Union St., Montclair, N. J. (1916)

Weber, Adna Ferrin, 464 Elin Ave., Richmond Hill, L. I., N. Y. (1896)

Weber, Gustavus A., 1851 Newton St., N. W., Washington, D. C. (1893)

Webner, Frank Erastus, Endicott, N. Y. (1910)

Weed, Alonzo R., 40 Central St., Boston, Mass. (1909)

Weeks, Rufus Wells, 346 Broadway, New York City (1895)

Well, A. Leo, 821 Frick Bldg., Pittsburgh, Pa. (1910)

Weisman, Russell, Mount Holyoke College, South Hadley, Mass. (1913)

Welch, Archibald A., 21 Woodland St., Hartford, Conn. (1914)

Welch, Charles E., Westfield, N. Y. (1916)

Weld, Louis D. H., Yale University, New Haven, Conn. (1909)

Welles, Francis Raymond, 92 Ave. Henri Martin, Paris, France (1888)

+Wellesley College Library, Wellesley, Mass.

Wellington, Charles Oliver, 50 State St., Boston, Mass. (1912)

Wellman, Hiller C., The City Library Association, Springfield, Mass. (1908)

Wells, Bulkeley, Telluride, Colo. (1911)

†Wells College Library, Aurora, N. Y. Wendt, Edwin F., Cosmos Club, Washington, D. C. (1915)

WERMUTH, WILLIAM C., JR., 4030 Sheridan Road, Chicago, Ill. (1915)

WESCOTT, C. W., Belfast, Me. (1912)

Wessmann, A. C., 531 West 37th St., New York City (1915)

West, Carl J., Ohio State University, Columbus, Ohio (1914)

West, William L., 52 West 3d St., St. Paul, Minn. (1901)

Westerfield, Ray B., 822 Yale Sta., New Haven, Conn. (1912)

Weston, Nathan Austin, University of Illinois, Champaign, Ill. (1894)

+West Virginia University Library, Morgantown, W. Va.

\*Wetmore, George Peabody, Newport, R. I. (1890)

Wetzel, Thomas J., Richfield Springs, N. Y. (1916)

Wexler, S., Whitney-Central Natl. Bank, New Orleans, La. (1911)

Weyforth, William Oswald, Western Reserve University, Cleveland, Ohio (1915)

WEYL, WALTER E., Woodstock, N. Y. (1898)

WHEELER, JOSEPH L., Reuben McMillan Free Library, Youngstown, Ohio (1916)

WHINERY, CHARLES C., 120 West 32d St., New York City (1914)

WHITAKER, ALBERT CONSER, Stanford University, Calif. (1902)

WHITE, ANDREW DICKSON, Ithaca, N. Y. (1887)

WHITE, BISHOP, West Hartford, Conn. (1915)

WHITE, Mrs. Eva W., 40 Wenonah St., Roxbury, Mass. (1911)

WHITE, G. C., 3219 11th St., N. W., Washington, D. C. (1913)

WHITE, HORACE, 18 West 69th St, New York City (1892)

WHITE, JAMES, Commission of Conservation, Ottawa, Ont., Can. (1911)

\*White, Julian Leroy, 51 News Bldg., Baltimore, Md. (1887)

WHITMORE, EDGAR, 17 Park Place, New York City (1915)

WHITMORE, JAMES BRYANT, West Tech. High School, Cleveland, Ohio (1911)

WHITNACK, R. C., Keio University, Tokyo, Japan (1911)

WHITNEY, ALBERT WURTS, 13 Park Row, New York City (1912)

WHITNEY, ELI, New Haven, Conn. (1911)

WHITNEY, NATHANIAL RUGGLES, Johns Hopkins University, Baltimore, Md. (1911)

WHITTALL, M. J., Worcester, Mass. (1911)

WHITTEN, ROBERT HARVEY, 477 East 24th St., Brooklyn, N. Y. (1900)

WHITTLESEY, WALTER LINCOLN, 400 Riverside Drive, New York City (1906)

WICKERSHAM, GEORGE W., 40 Wall St., New York City (1913)

Wiest, Edward, 62 Buell St., Burlington, Vt. (1916)

WILCOX, DELOS FRANKLIN, 75 Sixth St., Elmhurst, N. Y. (1898)

WILDMAN, JOHN RAYMOND, 128 West 11th St., New York City (1912)

WILDMAN, MURRAY SHIPLEY, Stanford University, Calif. (1907)

WILEY, JACOB S., 15 Dey St., New York City (1911)

WILEY, S. H., Fredonia, Kan. (1915)

WILGUS, JAMES ALVA, Platteville, Wis. (1901)

+WILGUS, W. J., 165 Broadway, New York City

WILKIE, EDWARD A., 101 Milk St., Boston, Mass. (1909)

WILLARD, N. W., 1015 Railway Exchange, Chicago, Ill. (1915)

WILLCOX, WALTER FRANCIS, Cornell University, Ithaca, N. Y. (1892)

WILLCOX, WILLIAM G., 3 S. William St., New York City (1911)

+WILLIAM SMITH COLLEGE, Geneva, N. Y.

WILLIAMS, ARTHUR, Irving Place and 15th St., New York City (1913)

WILLIAMS, CHARLES BYRON, Iowa State College, Ames, Iowa (1913)

WILLIAMS COLLEGE LIBRARY, Williamstown, Mass.

WILLIAMS, ELLIS D., 560 Drexel Bldg., Philadelphia, Pa. (1910)

WILLIAMS, FRANCIS M., 311 Law Exchange, Jacksonville, Fla. (1909)

WILLIAMS, FREDERICK M., Room 801, Lilley Bldg., Waterbury, Conn. (1916)

WILLIAMS, G. C. F., 990 Prospect Ave., Hartford, Conn. (1901)

WILLIAMS, HENRY SMITH, 120 West 32d St., New York City (1910)

WILLIAMS, IRA JEWELL, 1421 Chestnut St., Philadelphia, Pa. (1914)

WILLIAMS, ROGER H., 31 West 12th St., New York City (1913)

WILLIAMS, THOMAS TALLESIN, Indian Education Service, Ramna, Dacca, India (1912)

- \*Williams, Timothy Shaler, Lloyds Manor, Huntington, L. I., N. Y. (1901)
- WILLIAMS, W. H., 32 Nassau St., New York City (1910)
- WILLIAMSON, CHARLES C., Room 500, Municipal Bldg., New York City (1904)
- WILLIS, HENRY PARKER, 56 Fairview Ave., New Brighton, New York City (1898)
- Wills, William Mintzer, 3714 Walnut St., Philadelphia, Pa. (1912)
- WILSON, ALEXANDER M., 151 East 19th St., New York City (1912)
- †WILSON COLLEGE LIBRARY, Chambersburg, Pa.
- Wilson, Edwin Bidwell, Massachusetts Institute of Technology, Boston, Mass. (1912)
- Wilson, Hugh M., Little Woods, Park Road, Hartsdale, N. Y. (1910)
- WILSON, JAMES HARRISON, Wilmington, Del. (1912)
- Wilson, Ralph Byron, 54 Crescent St., Cambridge, Mass. (1913)
- Wilson, Woodrow, The White House, Washington, D. C. (1886)
- Windle, Charles T., Bureau of Corporations, Washington, D. C. (1910)
- Wing, David Laforest, Bureau of Corporations, Washington, D. C. (1904)
- Winslow, Guy M., Auburndale, Mass. (1913)
  \*Winslow, William Copley, 525 Beacon St., Boston, Mass. (1890)
- WINSTON, AMBROSE PARÉ, Pearre, Md. (1901)
- +Wisconsin Free Library Commission, Legislative Reference Department, Madison, Wis.
- +Wisconsin Tax Commission, Madison, Wis.
- +Wiscosin, University of, Library, Madison, Wis.
- Wishart, W. C., 5635 Grand Central Terminal, New York City (1911)
- WITHINGTON, FREDERIC S., 601 Securities Bldg., Des Moines, Iowa (1915)
- +Wofford College Library, Spartanburg, S. C.
- Wolf, L. J., 11201 Bellflower Road, Cleveland, Ohio (1912)
- Wolfe, Albert Benedict, 909 West 18th St., Austin, Texas (1905)
- Wolfe, French Eugene, Colby College, Waterville, Me. (1912)
- Wolfenstein, Samuel, 1624 Compton Road, Cleveland, Ohio (1911)
- WOLMAN, LEO, 401 East North Ave., Baltimore, Md. (1914)
- Wong, Charles A., Box 1006, Honolulu, T. H. (1914)
- Wood, C. J., 1600 Hobart Bldg., San Francisco, Calif. (1915)
- Wood, Fred H., 165 Broadway, New York City (1915)
- Wood, FREDERICK A., 295 Pawtucket St., Lowell, Mass. (1894)
- Wood, Kenneth F., Saylesville, R. I. (1911)
- Wooddbury, Robert Morse, 207 Linden Ave., Ithaca, N. Y. (1912)
- \*Woodford, Arthur Burnham, 469 Whalley Ave., New Haven, Conn. (1887)
- Woods, Robert Archev, 20 Union Park, Boston, Mass. (1904)
- WOODWARD, CHARLES GUILFORD, 742 Asylum Ave., Hartford, Conn. (1913)
- WOODWARD, S. W., Woodward & Lothrop Co., Washington, D. C. (1909)
- Woolston, Howard B., 110 Morningside Drive, New York City (1915)
- +WOOSTER COLLEGE LIBRARY, WOOSTER, Ohio
- WOOSTER, HARVEY ALDEN, Columbia, Mo. (1911)
- †Worcester Free Public Library, Worcester, Mass.
- +Worcester Polytechnic Institute, Worcester, Mass,
- Working, Holbrook, 506 Dryden Road, Ithaca, N. Y. (1915)
- \*Worthington, T. K., Lancaster, Pa. (1886)
- WRAY, J. G., 230 W. Washington St., Chicago, Ill. (1912)

- WRIGHT, ALBERT B., University of Pittsburgh, Pittsburgh, Pa. (1914)
- WRIGHT, CARY THOMAS, 1601 Grand Ave., Carthage, Mo. (1913)
- WRIGHT, CHESTER WHITNEY, University of Chicago, Chicago, Ill. (1904)
- WRIGHT, GENERAL M., 606 S. Hope St., Los Angeles, Calif. (1915)
- WRIGHT, H. M., 305 U. S. Courthouse and P. O. Bldg., San Francisco, Calif.
- WRIGHT, JAMES MARTIN, 1314 Speight St., Waco, Texas (1911)
- WRIGHT, PHILIP G., 72 Fayerweather St., Cambridge, Mass. (1913)
- WROE, W. E., 208 E. Illinois St., Chicago, Ill. (1914)
- WULSIN, LUCIEN, 142 West 4th St., Cincinnati, Ohio (1904)
- YANG, KWEEU E., Janus Court, Morningside Drive, New York City (1912)
- Young, Allyn Abbott, Cornell University, Ithaca, N. Y. (1900)
- YOUNG, ARTHUR NICHOLS, 53 Jefferson Road, Princeton, N. J. (1911)
- Young, Carlos, Macondray & Co., Inc., Manila, P. I. (1911)
- Young, Frederick George, University of Oregon, Eugene, Ore. (1888)
- Young, Lewis Emanuel, 619 W. Springfield Ave., Champaign, Ill. (1915)
- Young, NATHAN BENJAMIN, Tallahassee, Fla. (1911)
- Youngman, Anna Pritchett, The Ridgeway, Wellesley, Mass. (1909)
- ZAPOLEON, LOUIS B., The Dunsmere, 2523 14th St., N. W., Washington, D. C. (1915)

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U. S. Department of A Walker, F. Warne, F. J. Weber, G. A. Wendt, E. F. White, G. C. Wilson, W. Windle, C. T. Wing, D. L. Woodward, S. W. Zapoleon, L. B.

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†Rockford College Library

Springfield †Illinois State Library †Legislative Reference Bureau Prior, J. H.

Urbana Andrews, J. B. Bogart, E. L. Clark, F. E. Coffey, W. C. Fairlie, J. A. Gray, Miss C. E. Heilman, R. E. †Illinois, University of, Library James, E. J. Litman, S. Robinson, M. H. Russell, F. A. Scovill, H. T. Stevens, J. G. Stewart, C. L. Thompson, C. M. Thompson, J. G.

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†Indiana University Library
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Wellesley
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Larrabee, Miss H. L.
Youngman, Miss A. P.
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Wellesley Hills

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Peavey L. D.

Perrin, H. L.

West Lynn

Alexander, M. W.

West Newton

Day, H. B.

Ellis, G. H.

Jones, E. S.

Williamstown

Clark, D. T.

Droppers, G.

Garfield, H. A.

McLaren, W. W. +Williams College Library

Worcester

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Dewey, F. H.

Feingold, L. E.

Fowler, R. B.

Garst, J.

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Hankins, F. H.

Logan, J.

Robinson, E. A.

Whittall, M. J.

†Worcester Free Public Library

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†Albion College Library

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Sharfman, I. L.

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Tucker, R. S.

Battle Creek

Kellogg, J. H.

Coldwater

Barlow, B. E.

Detroit

Atkins, P. M.

Barbour, W. T.

Burke, R. J.

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Jackson, R. B.

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McGregor, T. W.

Moore, W. V.

Nimmo, H. M.

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Selling, B. B.

Sillman, J.

Smith, H. H.

East Lansing

Hedrick, W. O.

+Michigan Agricultural College Li-

brary

Grand Rapids

Ranck, S. H.

Rindge, H. C.

Greenville

Sprague, R. F.

Houghton

Black, J. W.

Iron River

Byers, I. W.

Kalamazoo

†Kalamazoo College Library

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Mumford, E.

Muskegon †Hackley Public Library

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Hopkins Robbins, H. M.

Minneapolis
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Blakey, R. G.
Bowman, S. H., Jr.
Brittin, L. H.
Carpenter, F. H.
Dayton, D. D.
Durand, E. D.
Ebersole, J. F.
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Frame, W. A.
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Lescohier, D. D.
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†Minnesota Tax Commission
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of Agriculture
Polleys, T. A.
Pyle, J. G.
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West, W. L.

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Grenada Thomas, J. T.

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Defoe, L. M.
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Loeb, I.

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Independence Smith, F. M.

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Allen, B. F.
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- Haff, D. J. +Kansas City Public Library Meriwether, H. M. Osborne, R. S.
- Kirksville +Normal School Library
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- Memphis Schenk, H. H.
- Mexico Million, J. W.
- St. Charles †Lindenwood College for Women
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- Jones, B. Judson, F. N.
- Kirby, D. N. Kotany, L.
- Lanier, J. F. Lippincott, I.
- McCulloch, R.
- Mangold, G. B. Markham, G. D.
- McDonald, J.

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- Persons, C. E.
- †St. Louis Public Library
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- Taussig, B. J.
- †Washington University Library Webb, E. C.
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  - Billings
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  - Missoula
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  - Clarks
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  Martin, O. R.
  †Nebraska State Library
  †Nebraska, University of, Library
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- Omaha
  Belt, W. B. T.
  Kennedy, J. A. C.
  †Omaha Public Library
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  Rosewater, V.
  Rushton, J. H.

Taylor, W. G. L. Virtue, G. O.

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- Reno Adams, R.
- NEW HAMPSHIRE
  Berlin
  Brown, O. B.
- Concord
  Couch, Benjamin W.
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  Rossiter, W. S.
- Durham

  †New Hampshire College of Agriculture and Mechanic Arts

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  Asbury Park
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- Hoboken Stevens, R.
- Jersey City
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†Library, P. S. Building
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Bulkley, E. W.
†Plainfield Public Library

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Whitten, R. H.

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tion †American Telephone and Telegraph Co., Information Department †American Telephone and Telegraph

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Bennett, E. E.
Bernheim, J. C.
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Billquist, C. E.
Blair, J. P.
Blair-Smith, H.
Blake, E. M.

Blair-Smith, H.
Blake, E. M.
Boles, E. H.
Bonbright, J. C.
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Borg, S. C.
Boudin, L.
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Bowker, R. R. Brandt, H. J. Brandt, Miss L.

Breed, W. C.

Bristol, J. I. D.

Brookmire Economic Service, The

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Brown, D. Q.

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Brummer, L.

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Clark, E.

Clark, E. S.

Clark, J. B.

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Cohen, J. H.

Cohen, S. L.

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Cowl, D. H.

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Cox, G. C.

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Crowell, J. F.

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Devine, E. T.

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Dix, S. M.

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Ehrle, O. F.

Eidlitz, O. M.

Eitingon, W.

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Marwick, J.

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†New York Telephone Company, R. V. Marye, General Atty.

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rark, J.

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deRoode, A.

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Scott, C. R.

Scott, C. R.
Scott, L.
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†Shilthuis, W.
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Strong, B., Jr.
Stroock, S. M.

Straus, O. S.
Straus, P. S.
Strook, S. M.
Strook, S. M.
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Webb, H. S.
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Williams, R. H.
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